

Circuits of the Voice: From Cosmology to Telephony

Frances Dyson

1. THE MEANING OF THE VOICE:

While vocal communication between individuals within culture has received much attention from theoreticians, less has been given to the meaning of voice within different epistemological systems. 'The meaning of voice'... not only indicates a difference from 'the meaning of language' but more importantly implies that speaking is not wholly reducible to the predicament of being 'spoken by language' as many post-structuralists would suggest. It also involves a surrender to the non-semantic meaning which the voice generates in speaking language: the corporeal resonances and references it continuously emits despite our best efforts to contain the cough, the sigh, the strain, the hoarseness, the wheeze, the stammer, through which the body 'speaks', as it were, to the world. This aspect of the speaking voice has been referred to as the 'grain of the voice' by writers on the subject, and has fallen prey to a fairly massive cultural schism - that between the concrete and the abstract, or body and mind. An attractive solution has been to bifurcate the voice, to eradicate the linguistic side in favour of the purely sonorous and corporeal, and to view the latter as some kind of originary voice - voice unencumbered or constrained by language, thought, intellect.¹ However, the meaning of the voice is not reducible to inchoate bodily utterings, for its 'grain' is also intimately connected to the sonorous emissions of the mouth, the vibratory responses of the ear and the air circulating between them, and this phenomenal and visceral triad: voice, ear and breath, the very stuff of vocal communication, is always surrounded by a host of cultural beliefs connecting it to a symbolic system. Thus the 'originary voice', no matter how pure, is bound to a certain hermeneutics; prior to any utterance, it is already a metaphor, and already caught within particular circuits, switchboards or 'machines' which both literally and figuratively encode, transmit and give meaning to vocal acts.

This paper will examine three cosmological, mythological and epistemological systems in which the meaning of the voice is paramount: that of the Dogon; the Christian; and post-industrial, western culture. These systems reveal a common hermeneutics based not so much on what the voice says, nor what it reveals about the body, but on its transmission or flow between one space, be it physiological, phenomenal or spiritual, and another. From this perspective, the meaning of the voice lies in its movement; its ability to occupy different symbolic niches within different cultural/historical epoches. Perhaps the best description of this kind of flow is that which the metaphor of the circuit evokes. There are many models for circuits: the Chinese system of meridians or energy flows circulating the body; the western neuro-physiological mapping of the nervous system; transportation networks, money markets, communication grids. The circuitry is as much metaphorical as material or technological, and represents the flows and logics of cultural proclivities as much as the movements of material phenomena. When thinking of voice transmission both as an aural phenomenon and as a symbol, one is immediately reminded of Christian theology's extremely productive and adaptable circuit, the Holy Trinity, consisting of The Word, the Word made Flesh, and the Breath or Spirit. This of

course has been modified in recent times to accommodate lesser Trinities and means of transmission, but the flow or logic remains the same, as do the consequences. For it should always be remembered that circuits generate powerful metaphors, they name deities and demons, they perpetuate myths, and their particular construction will determine the nature of social relations. At the same time they are in visible, and can often only be seen 'elsewhere' in radically other cultures or epochs.

2. VOICE, BREATH AND EXCHANGE IN DOGON COSMOLOGY:

One such 'elsewhere' can be found in the cosmological circuit of the Dogon people who inhabit the Upper Niger in north-west Africa. Researches by ethnologists Marcel Griaule and Genevieve Calame-Griaule reveal that the Dogon regard the voice and speech as the original movers behind the forces of creation and the perpetuity of existence, and have based their complex systems of astronomy, calculation, anatomy, physiology, pharmacology and theology on the symbolic power of speech and 'the Word'.² While it is impossible to go into the vast details of Dogon cosmology here, a number of points will help clarify the significance of the triad_voice, ear and breath_within the general hermeneutic system, and provide a relief against which the meaning of the voice in western thought becomes visible. Perhaps the most salient feature of Dogon mythology is the correspondence between the metaphor of speech, speech itself, and worldly actuality. Because the symbols of speech have the value of fact, all phenomena are regulated by the passage of the voice, for the Word is always spoken and is always present in the formation and flows of being. The first words, constituting the first 'language' of the world, were:

...breathed sounds scarcely differentiated from one another, but nevertheless vehicles. Such as it was, this ill-defined speech sufficed for the great works of the beginning of all things. [MG:20]

They were composed of the warm vapour which both conveys and constitutes speech, which 'has sound' and which dies away. They did not originate as a singular, coherent and eternal Word (as in the Biblical myth), but rather as a vapourous 'sounding'; voice but not yet speech which 'clothed' the world, inscribing, as a text, its fabric with the spiritual revelation of existence. The connection here between sound, words, language, text and cloth (textile) is important, for it implies that language, as text, is a creative, existential technology which also embraces multiplicity: the multiplicity of sounds indistinguishable as words, of sound as both aural phenomenon and water-bearing breath or vapour.

The second Word heard on earth was clearer than the first and led directly to the art and primary metaphor of weaving:

...the Spirit was speaking while the work proceeded... he imparted his Word by means of a technical process, so that all men could understand. By doing so he showed the identity of material actions and spiritual forces... [the words] were woven in the threads... they were the cloth and the cloth was the Word. [MG:28]

This notion of word-weaving has parallels in western idioms: we think of 'text' (from the Latin 'textere': to weave) as a weaving of words, and are familiar with expressions such as 'weaving a web' (usually of lies), 'spinning a yarn', losing the 'thread' of a conversation, creating a 'fabrication', etc. However, 'the Word' of the Dogon is not a word in the usual sense - firstly because it is synonymous rather than analogous with a material thing, especially cloth which is worn because, as the Dogon sage Ogotemmel remarks, "to be naked is to be speechless". Secondly because it is composed of water-bearing breath, water symbolising the primary cosmic and human purpose of procreation and

regeneration. Thirdly because the word is also a sound - the sound of weaving with block and shuttle, which translates as "the creaking of the word".³ The third Word develops the more materialistic aspects of existence, representing the integration of divine principles and forces with the human condition. It initiates iron founding, agriculture, grain storage, the human skeletal form, drumming and the hierarchical classification of beings within the world order, with each activity or schematic rendering becoming more complex than the last.

Within the purview of the third Word, the Dogon's hermeneutic approach to life inflects every aspect of matter and being: speech is deeply symbolic, relating both to nature, industry, and knowledge; all phenomena are considered as signs to be interpreted, all events are messages of some sort. Knowing the world is understanding its signs, given in symbols, which are synonymous with 'the word of the world', while the calling of humanity is the interpretation of existence. Because actions and words are linked together, speech symbolically represents the outcome of an action - indeed as Genevieve Calame-Griaule summarises: "action is speech transformed into matter, speech taken to its final limit".⁴ But the material of speech - words and voice - is also action and sign in and of itself. As mentioned, speech is always heard: there is always an ear (even if it only be a potential ear) which will hear even the faintest whisper. When a person speaks, their inner psycho-physiological states are projected upon the listener in the form of a doppelganger or double; their words enter the listener, causing actions which have beneficial or detrimental effects.

Because water is considered the most desirable, indeed the necessary element within Dogon cosmology, 'fluid', easily understood speech, known as 'moist', symbolises fecundity and the 'natural' state of the universe. Speech filled with anger (the 'heated' argument) on the other hand, indicates that air and fire are predominant while earth and water are absent because the saliva, as fluidity, has dried up and the words have become incoherent or 'unearthed'. This kind of speech is antithetical to the natural order because it represents the dry season, drought and periods of infertility. In the same way that an absence of water interferes with the bearing of fruit or the ripening of the seed, hot, incoherent speech interferes with the flow of language and meaning; it is "speech without seeds", it fails to produce a response in the listener, and in extreme cases will cause infertility.⁵ The generative aspects of speech create a unity and coherence between the voice of the speaker and the ear of the listener via the transmissions and movements between them. It is these movements - within the individual, between the speaker and the listener, from the inside to the outside, from above to below - which constitute life:

To draw up and then return what one has drawn - that is the life of the world... the Word is for everyone in this world; it must come and go and be interchanged, for it is good to give and receive the forces of life.⁶

While the voice is able to summon divine action, to call into being the person named, to emit harsh and unfruitful words or to penetrate and fertilise, it is able to do this only because, being breath and vapour, it carries the life-force; it is the bearer of the Word, indeed the Word itself. However, the power of the life-force is dependent upon a symbolic union between the two sexual organs - the mouth and the ear. The product of this union is the literal and metaphorical conception of a 'seed', both human and divine, which may or may not manifest in birth or further speech.

There is perhaps no better example of the intricate circuit the Dogon construct to map the flows between body and mind, individual and community, nature and culture, the human and the deific, generated via the voice and the Word, nor is there a clearer warning of the perils of interrupting such circuits, than the idea of 'decayed' speech. This describes a nasal voice with improper timbre, and a resulting speech which is caught between the nose and the throat,

unable to follow the proper course of words nor fulfil its generative function. Embodying a lack of fertility the words literally 'decay', causing an unpleasant sensation in the listener not unlike a bad odour. When the Dogon speak of "a hearing smell" or use the expression "to hear the bad odour of your words is bad for me" [G.C-G: 42], they are referring to the physical as well as psychical affects of 'bad speech' on the listener. In assimilating the other's speech, transforming it into water which then irrigates the internal organs, the listener's body is itself made vulnerable. The liver, for instance, as centre of the individual or object and locus of the life-force, is affected by the biochemical and spiritual ingredients within the 'food' of speech:

The liver serves as a receptacle while speech, still in its basic water form, begins to boil. Steam accumulates. The fat in the liver supplies speech with oil, and by melting gradually lends sweetness and an unctuous quality to the words about to be said. The words boil gently and then go out in the form of a small, light stream. The uttered words are good, and have a beneficial effect.

When the liver is unhappy, there is no heat to warm the fat, and the words lack charm. In anger, the heat produced is too intense, the water contained in the words comes to a boil. The oil becomes too hot, it seethes and sputters causing the words uttered to be spiteful, fiery, bitter from the bile the gall bladder pours into the liver. [G.C-G: 45]

This vulnerability to the other's speech is a necessary factor in the circulation of speech and/as life, for although it is true that 'bad' words cannot be repelled - "the ear cannot be made to spit" - the ear's receptivity, its bi-sexual and dualistic nature, symbolises the individual's essential openness to the world. At the same time, such openness is regulated: the pathways of speech are directed by the structure of the ear, the alchemy of interior processes is determined by organic givens, the routes of elemental and psychic forces follow a rhythm of ascent and descent within the body and through the cosmos. The circulation of life: the word, the seed, the life-force, water, knowledge and information - all these elements evolve from the interior of the individual to the exterior reality. The circuit is thus continually evolving between the spiritual and the mundane - when its flows are blocked or interrupted, death and decay will result.

3. VOICE, BREATH AND SPIRIT-FLOWS IN THE CHRISTIAN TRADITION:

To apply the model of a circuit to a culture considered by most westerners as 'other' might seem unforgivably eurocentric. However, there is no doubt that both the Dogon and Christian symbolic system share common roots in Arabic and Egyptian mysticism. Both, for instance, believe that creation proceeded from a primordial 'word', indicating their commitment to an anthropomorphic and hermeneutic approach to existence. Both configure the word as a medium for transmutation, and consider language, itself composed of 'joints' or syntactical relations, as representing a cosmological 'text' or universal fabric, there to be unravelled and deciphered. The categories or organising principles - the very mechanics of interpretation - are also similar: four elements - two sexes and two motions, ascent and descent - constitute the basis for dichotomy and dualism.⁷ Finally, the Dogon life-force or spirit ('nama') also corresponds to the Greek concept of pneuma and the Christian concept of grace.

That voice and sound are integral to the symbolic system of Christian culture is evidenced by the primary circuit of the Holy Trinity: the Word, the Word made flesh, and the Breath or Spirit, while the example par excellence of human/divine exchange is the myth of the immaculate conception, in which the Madonna is impregnated by the Word of God via her ear. As a circuit of greater complexity, this myth offers the procreative power of the word (as 'seed':

semen), the efficacy of the breath, the receptivity of the ear and the notion of vocal transmission as the medium for divine transubstantiation, as 'axis' upon which movement and exchange between the heavens and the earth can occur.⁸ The Word (or seed), characterised as breath, is generally thought to have been carried by a dove or a tongue of fire, representing the Holy Spirit, and in Quattrocento paintings is often depicted as being transmitted through a tube fixed between the mouth of God and the Madonna's ear, or travelling along a ray of light. The primary cosmic principle and metaphor motivating this passage from above to below is however not water ('vapour' carried by the voice) as in the Dogon system, but soundless air. One consequence of this difference is, as I will later elaborate, the inability of the circuit to offer an equitable exchange between the divine and the human without serious modifications to the nature, indeed the existence, of both.

Air - the element and the symbol - has a long history in hermetic thought. However it has not always been privileged over the other elements, nor considered the cardinal force. It was only with the Greek concept of *pneuma* that air began to represent the vital principle, the soul and the fertilising 'breath' of God. For Platonius, writing in the second century AD:

As the association of the soul with matter implies a degradation it cannot be placed in immediate contact with the body, so it makes use of a mediating element, a form of *pneuma*, in which to clothe itself and be guarded from a defiling character; ...⁹

From the notion of *pneuma* as Breath/Spirit, the doctrine of the humours developed - disease by infection was thought to be carried by bad air, the *pneuma* was conceived as a regulating and nourishing principle acting directly on the body. The *pneuma* doctrine, containing all these physical, elemental and spiritual attributes, also appropriated the discovery and workings of the nervous system - Augustine, writing in the third century AD, maintained for instance that the nervous system consisted of tubes of air. This is important, because it links the idea of breath with the notion of electrical impulses which later became the trope of the nervous system. It also mirrored within the human anatomy the initial 'speaking' tube, through which God's word, as 'seed', travelled from the heavens to the Madonna's ear.

The *pneuma* doctrine corresponded with a shift from the tenor of the Old Testament, where sound featured often as a manifestation of divine presence and intervention and the voice of God thundered from above, to the Christian emphasis on the 'Word' uncontaminated by bodily voice. Also, the passage of the Word - descending on a ray of light or through an enclosed tube - ceased to involve any externalisation; in particular it did not mingle with earthly elements or atmospheres. Consequently, both the materiality of the voice, ear and breath triad, and the corporeal connection between mouth and ear, was forgotten. Viscerality and phenomenality became increasingly reduced to abstract symbols and metaphors, and the circuits of the voice were set on a path of ascent from "evil matter" (Platonius) to divine intelligence. This symbolic journey also, it should be noted, allowed the now soundless, bodiless voice a certain immortality. Not only was the Word of God rendered anechoic - being silent Breath/Spirit, it eventually ceased to have any associations with the mortal physical body, including the breath, altogether. According to David Applebaum, by the time of Aristotle (fourth century BC) the breath had become an instrument: "in voice the breath in the windpipe is used as an instrument to knock with against the walls of the windpipe"¹⁰, and as such could be viewed as a proto-technology rather than an involuntary organic process. This severed its prior attachment to the body: no longer the vital and necessary element, the breath was merely a means to an end - the end being the production of voice. Yet the theological voice, having already undergone the above transformations, was itself becoming fused with the inner monologue of Cartesian dualism, and the inner voice of the Christian conscience. Representing cognition on the one

hand, the soul on the other, and characterised as intellectual/spiritual rather than corporeal, it had no need of bodily breath, and was therefore not subject to the condition of mortality which the breath, by its very presence, automatically signals. As Applebaum writes:

The breath is dispelled from the mind's voice altogether. The mind does not perish like the breath. Therefore mental voice is immortal.¹¹

A voice situated in the mind or soul (which of course does not breathe) would now connect with an ear similarly abstracted, and indeed in the modern era, with the institutionalisation of electricity and the telephone, the ear as receptive organ begins its prosthetic reformulation. On the one hand abstracted (deified) through technology, on the other given a new exteriority through electricity and communication grids, the ear and its associate the mouth, together with the voice, ear and breath triad, begins its metaphorical descent into the material world - to the Trinity of the nuclear family, the despiritualisation of pneuma as electricity, and the noise of mass communication.

4. TELEPHONY AND TELEPATHY:

It is to the telephone that the metaphor of the circuit is most readily applied, prompting certain connections with the 'transmissive' mappings of the voice and speech already described. The telephone shares with the 'elemental/theological' circuits of the Dogon and Christian cultures similar ideas and mechanisms of transference. It is constituted by a circuit: sender-operator-receiver, which allows the disembodied voice of the speaker to be electronically coded and sent via a communication network to a receiver (instrument), which then decodes or interprets the speech and amplifies it for the listener. The medium in this case is electricity. Compare this circuit to that of the Trinity and the myth of the Immaculate Conception: the word of the Father (the speaker, the initiator, the *caller*) is 'condensed' into breath and travels by the Holy Ghost, or the Spirit, to become either word, breath or seed through a process of decoding or interpretation. This process allows transubstantiation to occur - Christ is born as the word made flesh. The medium is breath or light. The Dogon circuit is similar: the creator creates a universe of signals (signs, messages) which must then be interpreted, decoded by the individual, who reads the speech of phenomena and transforms it into action, or verbal speech.¹² The medium is the life-force or 'nama'. Common to all three systems is the belief that vocal transmission is primordially generative: creating dialogue which is not just restricted to speech, but which causes transformations within bodies, between bodies, between radically different spheres such as the heavens and the earth, and radically different forms of being - human and celestial. And these exchanges are themselves embedded within a symbolic system which endows each factor in the flow - voice, air, breath, movement, ear and mouth - with multiple metaphoric values and relational possibilities.

The nature of the symbolic system is of course integral to the functioning of the culture, and the telephone system also forms part of a wider communicational and cultural matrix, providing a link, an organisational network, between individuals in a society and directing flows of speech necessary for the society to survive. Without the telephone, one is disconnected from the larger, technological society; literally and metaphorically 'cut-off'. Yet the telephone's ambit is not purely communicational - by bringing the outside into the home and day-time into night-time, by transmitting invisible voices from the electronic ether (from the heavens) at great speed, by delivering a 'call', the telephone penetrates and transforms spatio-temporal, conceptual and cultural barriers. It transmits the voice of the 'other', but at a slightly ethereal frequency - the telephonic voice *sounds* as if it is coming from an 'elsewhere'; public and placeless and at the same time extremely intimate - a whisper from ear to ear,

mind to mind. The Madonna, like the clergy of today, was thought to have received a 'calling', presumably through the 'speaking tube'. The telephone, like the voice of God, also calls the individual to answer, but to answer a voice bereft of body, of locale, of full sonorous presence - a voice caught up in some placeless communications network, subject to interference, crossed lines, and abrupt terminations.

Not that the call of God, at least in the Christian circuit, has always been direct. Indeed, the introduction of the telephone switchboard, regulated by a female operators, as a means of mass communication is analogous to another difference between the Old and New Testaments. As mentioned in the Old Testament the great prophets, Moses, Abraham etc., heard the voice of God directly, not necessarily as speech, but definitely as sound. The transmission between deity and human was therefore two-way and unmediated. With the New Testament, God's word is mediated by the body of Christ - a body which, while highly accessible, is also unquestionably human. No longer appearing in other sonic forms (as wind or whatever), God's Word does not require the same degree of interpretation. Furthermore, its message is no longer concerned with the salvation of a chosen people. Rather, the preachings of Christ are directed to the salvation of humanity at large. Christ's voice is projected at the level of mass communication, it speaks to the 'brotherhood of man', and its speaking is literally dependent upon the presence of vocal chords, upon embodiment. The latter is ultimately guaranteed by the Immaculate Conception - that Christ was 'of woman born'. The Madonna in this case is a little like an operator connecting two worlds or dimensions - the one from above to the one below. Interestingly, in the same way that the vocal transmissions of the ancient God were unmediated and two-way, the telephone proper doesn't need an operator either - between Bell and his assistant Watson there was initially a direct line - one called and the other answered. With the employment of operators, the telephone entered the age of mass communications, an age concerned not with one-to-one correspondence (Bell to Watson) but with the linking of humanity at large; the 'brotherhood of man'. At the same time, developments in the technology made the 'message' much clearer: the voice is heard as voice rather than a jumbled signal, it emits decipherable speech rather than the sounds of the wind or the murmuring waters. Thus for both the invisible voice on the telephone, and the invisible voice of God, a woman is necessary for it to become universal, that is, to depart the shallow shores of individual happiness and assume responsibility for the absolute, indubitable connection between the caller and the called.

Telephony, however, cannot be contained within nor wholly explained by Christian mythologies, but is open to its own hermeneutics. It is not strictly theological or elemental because it appears in the 'electronic' age, and electricity is not quite an element nor a life-force or *pneuma*. Nor, in the early twentieth century, is the Trinity the main unit or model in circulation. This is, after all, the age of humanism, and is 'post-Christian' in the sense that it is often characterised as the period of when man became 'the measure of all things', and of science and technology, a credible substitute for God. However, the organisational structure or motive of modernity's theological past still resonates: in the place of God's Breath or the Spirit as the vehicle transmitting ethereal voices, lies the electronic ether; in place of the silent voice of God, or the audible preachings of Christ, the electronic voice of the telephone is installed; and in the place of the Holy Trinity stands the nuclear family. However, there are further modifications: not only does the female operator, like the Madonna, occupy a pivotal role in the 'transmissions of the word', but the bodies and the vocal apparatuses of psychic mediums - generally women, become the chief vehicle for the other-worldly channellings so popular at this time. Similarly, with the popularisation of Freudian psychoanalysis, the western hermeneutic system, while still grounded upon the 'Word of the Father', is now embodied and 'spoken' by the analyst who, in many respects taking the place of the

priest, (as the priest is the 'mouthpiece' of Christ, as Christ was the 'word made flesh') interprets and translates the 'inner voice' of the unconscious.

Freud linked telepathy with telephony, viewing the latter as a medium for the transmission of the former, in the same way that psychoanalysis was the 'instrument' for analysing, through interpretation, the telepathic dream, and the means by which the hidden messages of the unconscious and the ethereal could be "given a voice".¹³ Through this connection, Freudian psychoanalysis becomes both the medium (metaphorically the telephone) and the interpretative method of telepathy, or thought transference. It allows the psychical to become physical... like the breath or pneuma, like the electrical impulse itself.¹⁴ But these telephonic tropes are also wired with Futuristic, human-as-machine phantasies and fears, revealed by psychic disorders of the time in which patients discovered 'telephones in the head', and analysts speak of the "automatic machinery of the unconscious complexes".¹⁵ With the analysis of schizophrenics, we find that the telephone (the unconscious) inside the head has gone awry: its voice is muffled and directionless, it lacks an operator and can only be regulated by the intercession of the analyst, who takes the place of the traditionally female operator.¹⁶ This is interesting in light of the early telephonic experiments of Bell and Watson. Watson was intrigued with communicating with the dead via the telephone (as were Tessler and Marconi), and would attend nightly sances in Salem - the town known for its witch burning in the middle ages. Witches practised mediumship, held sances, but also, belong to the ancient tradition of alchemy. Avital Ronnel describes Watson's experiments with the telephone as 'electronic' witchery: a substitute for the 'mediumship' which was held to be a feminine ability at the time, taking place in the symbolic town of Salem.¹⁷ His experiments with electricity, "that occult force", is another form of witchery: alchemy, the primary science of the transmutation of matter.

5. DEATH CIRCUITS AND THE ANAEROBIC VOICE IN THE MODERN PERIOD:

In the Dogon cosmological circuit, air and fire are masculine and make for "bad speech" because water is lacking. Water is also lacking in the Christian concept of the Holy Trinity which, according to Ernest Jones, replaced the eternal Mother, the feminine, symbolising water, with the Spirit - breath, air, fire, electricity. In the modern era, with the recording and transmission of disembodied voices, interest in the ethereal turned to the newly dead. Bell carried a dead ear with him on his treks to invent the telephone - the ear of a corpse becoming the first receiver. And Freud's telepathic cases, like the preoccupation of the mediumship common to the time, were most often concerned with messages from dead siblings, plugging the circuit of psychoanalysis into bad air and noise, decay and death.

The overwhelming presence of death as a founding metaphor of modernity is again linked to the evolution of the voice, both in terms of its meaning or cultural significance, and the symbolic circuitry regulating its transmission. While 'post-Christian' modifications directed the flows of voice towards the strictly human theatre of symbols, myths and meaning, at the same time they instilled in the content of vocal transmissions a distinctly human inflection. Messages of the afterlife, descending upon human ears from an immortal God, gave way to the more mundane concerns of man; the preaching and eventual crucifixion of Christ seemed more a symbol of human mortality than evidence of heavenly salvation; the 'inner voice' of the soul could be misheard as the chattering of an irrational unconscious; and the disembodied voice (once the purview of God) appeared, in the literature on sound reproduction at the time, to be wrapped in the shroud of bodily death, even if 'resurrected' by electricity. Throughout these transformations in the circuit, the distinction between God on the one hand, and human on the other, becomes increasingly ambiguous. God, or the godly, descends somewhat to the state of electronic ether, which is

eventually 'tapped' by wireless radio (a metaphor also for mediumistic channelling). Humans, through the control of electricity, ascend to the deific, and undergo a kind of reverse transubstantiation - not 'becoming God' but becoming like God through the immortality bequeathed to the machine.¹⁸ Because electricity, or the electrical circuit (the nervous system, the flows of bodily energy, the telephonic system etc.) is, like air itself, infinite, in the transition from pneuma to electrical impulse, in the re-definition of the breath 'as instrument' (Aristotle), the human form, now equipped with its telephonic ear and mouth, becomes, by association, a machine-like thing for whom it makes no sense to speak of death.

Yet the voice of this new form contains something of a death rattle, for the very possibilities it offers are also signs of an irretrievable loss. Just as in the shift from the Old to the New Testament where communication with God is mediated by representation (the apostles), text (the Bible) and the finite mortal voice of Christ, in the twentieth century, communication amongst the brotherhood of man becomes similarly mediated - first by the loudspeaker and then by the telephone, with in both cases the fullness of communication being lost. The brotherhood of man demands, by its size and constitution, an amplified voice, one that will reach the many ears gathered for the purposes of audition ('audire': to hear and obey) and ultimately, of deciding who may speak for, or represent them (vote-voice). At the same time, the masses cannot be heard when the loudspeaker is introduced - the voice of any response is therefore silenced. There are personal losses also: when one speaks to another on the phone, one hears only the fullness of one's own voice, not that of the other, who's voice is always diminished, in volume, in clarity and presence. Presence truly only belongs to the 'I' of the phone call, never the 'you'. One embraces then, a pseudo-solipsistic situation; on the phone one hears mainly oneself - it's a bit like talking to the analyst - an ear hears, but a little voice responds.

Solipsism, reflected in the concept of the 'inner voice' in western metaphysics, is an attempt to shut out the corporeal or phenomenal exterior, to close the gap between the mind and its thinking. The eradication of distance between voices is also the *raison d'être* of the telephone; it is the attempt to install an anechoic vacuum, a space of no distance, an absolute space which bodies, being voluminous things, cannot occupy, but through which disembodied voices can travel. The space of the network, the 'ground' of the telephone system, is mapped again, by a reified and closed circuit, transmitting from mind to mind, without any airborne or corporeal externalisation. It is also the domain of the anaerobic voice - the voice infused with electricity, defused of breath, evacuated, that is, of anything which would signal the body. Think of the long-distance call (especially international) where dialogue is cut off because of an untimely explosion of breath - a laugh, cough or exclamation. Indeed, speech itself is reduced to an interchange of monologues communicators adopt in order to accommodate the delay, the echo, and the potential interruption of transmission inherent in spontaneous conversation. According to Applebaum:

Breath retention and articulate voice form two sides of the compound completed by knowledge and technology... no technology of fullness exists. Technology is invented only when plenty is lost.¹⁹

Perhaps this is why the 'obscene' phone call is characterised by heavy breathing: the obscenity being the return of breath to the site of its elimination - the return of archaic breath, the breath of the body, to the clean and infinite topos of technology .

We remember the Dogon's distaste for decayed speech, "bad speech", speech that goes nowhere. With this in mind, listen to the following:

The phone booth is a grave in which the one buried alive is

re-animated by a woman's long distance breathing: the grave opens... The poet finds that he, too, is on the phone. As he looks into the receiver at his end of the end of the call, he visualises - alongside the distance he thus traverses - the woman with whom he has conversed. In her place he accepts the charges of mourning.²⁰

Mourning and loss, decay and death, are the effluents of a system where voice is caught in the throat, is repressed, stifled, and denuded of the body. In Dogon symbolism, the voice circulates primarily below the collar-bone, flowing through the body to the world and the listener outside. As a result it is always 'aired', completing an infinite cycle which connects body, mind, interior and exterior with the community, the cosmos and the elemental, phenomenal earth. In the western Christian system, the voice has become increasingly relegated to the mind, without return to the body, to earth, to mundane matter. It travels a symbolic circuit which survives only through increasing modification, abstraction and technologisation, and during this course is stretched between two literal and metaphorical 'axes':²¹ the disembodied voice of mass communications, and the non-vocal, non-sounding, anaerobic voice of the mind. With no middle ground - no 'earth' or 'water', the meaning of the voice is thus 'charged' with muting the cries of matter.

1. The phrase "the grain of the voice" was, I believe, coined by Roland Barthes in his essay by the same name. See Roland Barthes: *The Responsibility of Forms*, Hill and Wang, New York, 1985. The bifurcated voice also appears in David Appelbaum: *Voice*, SUNY Press, 1990, and Don Ihde: *Consequences of Phenomenology*, State University of New York Press, New York, 1986.
2. See Marcel Griaule: *Conversations with Ogotemmel*, Oxford University Press, 1970, hereafter cited as MC, and Genevieve Calame-Griaule: 'Voice and the Dogon World', *Notebooks in Cultural Analysis*, Vol. 3, ed. Norman F. Cantor and Nathalia King, Duke University Press, USA, 1986, hereafter cited as G.C-G.
3. *ibid.*, p. 73. Note that in the Dogon language the word 'soy' means garment, which clothes one with words, 'so', which recall the seventh 'soy' ancestor, who was the master of speech.
4. An example of this association would be the expression which translates as "it has now become tomorrow's speech" meaning that the work's continuation will be postponed until tomorrow. G.C-G:22.
5. *ibid.*, p. 28 *passim*. The body is regulated by eight spiritual principles, or "souls", associated with "nose, breath, life", because the principles move about as wind and enter the individual as s/he breathes. They may be male, female, intelligent (moving upwards) or animal (moving downwards) and as such reflect the essential duality of an individual composed of a double soul and penetrated by opposing movements and forces. Speech characteristics are also gendered. For instance, air and fire are masculine; earth and water are feminine. Feminine speech has more oil (timbre) which, represented as a 'life force', musicates speech, giving it warmth and presence.
6. Ogotemmel, cited in Griaule, *op. cit* (note 2), pp. 108, 136.
7. Think of the opposing forces: positive and negative, life and death, upper and lower, ascent and descent, common to Dogon and Egyptian hermetic thought, and also the 22 joints in the Dogon system compared to the 22 arcana in the Quabbalistic and Egyptian occult. The four elements feature in Astrology, generally representing both matter and movement. Air represents thought, inspiration (in-spire), speed, ethereal vapour, the sword - insight, 'piercing the veil of matter', the eye, masculinity. Water represents fluidity, the feminine, fertility, green, the unconscious, the moon, the hidden or secret, the cup or vessel, blood, life flow etc. *Earth* represents materiality, stability, the pentacle, money/values, ethics, etc.

Fire represents passion, transmutation, the wand, the phallus, the tree of life, the instrument.

8. For a lengthy and erudite analysis of this myth see 'The Madonna's Conception Through the Ear', in Ernest Jones: *Psycho-Myth, Psycho-History: Essays in Applied Psychoanalysis*, Hillstone, New York, 1974.
9. *ibid.*, p. 163.
10. Aristotle: *De Anima* 420b, cited in Appelbaum, *op. cit.* (note 1), p. 30.
11. *ibid.*, p. 31.
12. Note that seed is speech in the Dogon, Word in Christianity, and a euphemism for semen: impregnation.
13. Freud writes: do not forget that it was only analysis that created the occult fact - uncovered it when it lay distorted to the point of being unrecognisable. And further: [telepathy] is a kind of psychical counterpart to wireless telegraphy - The telepathic process is supposed to consist in a mental act in one person instigating the same mental act in another person. What lies between these two mental acts may easily be a psychical process into which the mental one is transformed at one end and which is transformed back once more into the same mental one at the other end. The analogy with other transformations, such as occur as speaking and hearing by telephone, are unmistakable... It would seem to me that psychoanalysis, by inserting the unconscious between what is physical and what was previously called psychical, has paved the way for the assumption of such processes as telepathy. Cited in Rickels, *op. cit.* (note 16), p. 28.
14. But the medium here, the telephone, the electrical, is both material and metaphorical - the metaphoricity almost short-circuits. With the analyst as the operator, "putting through, within the system of transference, the ultimate transfer, the transfer of the call, of that direct line to the first five years of the patient's life" as Rickels describes [p. 283], infantile associations form the basis of a symbolic structure in many ways similar to the infantile hermeneutic system which Ernest Jones regards as central to the conceptual and interpretative circuit of divinity, as expressed in the concept of pneuma, or divine breath, and by association voice, music all sonority. For Jones, this structure is grounded not in breath but in flatulence. Not in good, sweet sound, but in pungent noise.
15. Avital Ronell cites a patient of Jung who retained, alongside her cryptic discourse, a coherently critical agency she called the 'telephone'. Only by taking the place of the telephone is Jung able to engage in analysis, a procedure which leads him to describe her schizophrenia as "eroding the covering of consciousness... so that one could now see from all sides the automatic machinery of the unconscious complexes". Avital Ronell: *The Telephone Book*, University of Nebraska Press, Lincoln, 1989. p. 132.
16. Rickels suggests that the call from the Oedipalised past "taps into and outlasts telepathic lines of communication of dead siblings" thus the potential of mediumship is smothered by the re-establishment of the "home" now containing an internal and internalised "beyond", like a telephone in the head. Laurence Rickels, *Aberrations of Mourning*, Wayne State University Press, Detroit, 1988, p. 28.
17. Ronell, *op. cit.* (note 16), p. 247.
18. The new Spiritualism was in fact taken up by Christians as a shield against the increasing agnosticism the discoveries of science and the theory of evolution (linking man with the savagery of animals) was provoking. Messages from souls in the ether proved the Christian belief in immortality, at the same time the 'occult' connotations of electricity lent a scientific, technological flavour to many Spiritualist experiments. 'Techno-spiritualism' thus conflated technological and spiritual immortality within the concept of the ether, thought of as the cohesive force of the universe, the vehicle of transmission of all energies, and the sphere within which both telephonic, telegraphic and later wireless communications,

together with messages from the 'other side', could occur. For a detailed account see Janet Oppenheim, *The Other World: Spiritualism and Psychical Research in England, 1850-1914*, Cambridge University Press, New York, 1985.

19. Applebaum, op. cit. (note 1), p. 105.

20. Rickels, op. cit. (note 16), p. 293.