Prayer as a Cognitive Register

William Downes

University of East Anglia and
York University Toronto

1. Linguistics and the scientific study of religion

This is a part of a larger research programme in the study of religious language, thought and experience. The aim is to use linguistics as a methodology for the analytical investigation of culture. Linguistics provides the theory and how texts are comprehended, the empirical basis. The linguistics I deploy is eclectic, suiting the purposes at hand. Particularly useful has been cognitive pragmatics, Sperber and Wilson's (1995) relevance theory and Sperbers's (1996) epidemiology of representations and 'London School' socio-functional linguistics, especially the notion of register (Firth, 1957/1968: 175-179; Halliday *et. al.* 1964: 75-110; Halliday, 1978: 31-35; 122-125). Of the two approaches, I used cognitive pragmatics to study language and religion (Downes, 2011) and register to analyze a prayer in Downes 1998: 308-322.

1.1 Cognitive register

Combining the two approaches, I term the current study an inquiry into *cognitive register*. This interprets language use in contexts of situation and culture which constitute ways of thinking, feeling and motivation which are otherwise impossible. My working hypothesis is that multi-dimensional cognitive complexes like religion socially emerge into culture from innate capacities through these linguistically enabled modes of cognition. Cultural complexes are acquired through learning their cognitive registers, and therefore the particular thoughts, feelings and motivations that they enable. What is acquired is not only concepts, but a total felt experience (Downes, 2000). Cognitive register, to the degree it deals with meaning, is a linguistic relative of Wittgenstein's philosophical "deep grammar" and "language games". In this respect, I will utilize D.Z. Phillip's *The Concept of Prayer* (1981). J. R. Firth himself (1957/1964:179) makes this connection with Wittgenstein, which I will explicate in section 7.. Related to this and true to Firthian origins, linguistically enabled styles of cognition are normally also susceptible to socio-functional interpretation.

I begin by attempting to characterize religion as an emergent cultural complex which consists of mental representations with four key properties: first, reference to supernatural entities, more or less abstract or personalized, which transcend the everyday, natural world: second, rationalization of this realm; third, with respect to propositional attitudes, the affective-motivational; and fourth, normative 'oughtness', what to do and how to be (Downes 2011: 14-52). This cultural complex is made manifest in both language and other behaviours by a family of semiotic techniques, of which cognitive registers are the mental and linguistic form. These are used in contexts for disseminating, mentally interiorizing, practically applying, and evolving religious representations within a social world. Religion forms part of civil society,

with an especially normative, ethical-educative, ideological function. It can have multiple, diverse, often conflicting, relationships with both state and economy.

Representations and the cognitive registers through which they are made manifest, when widely diffused, become each person's changing cultural and social identity. When these are religious, they are within a context of human suffering and ultimate mystery, which is ultimately baffling. Because this context, indeed the whole world of experience does not entail a unique interpretation, it cannot uniquely determine any one certain cultural response. It is this tragedy of ultimate uncertainty about reality, hence whether and what is a correct relationship to it and to each other, that is the ultimate context of religion.

Representations and their registers create a *normative* social group with more or less rationalized common concepts, affects and motivations. This consists of persons who share 'oughtness' with respect to how they ought to feel, evaluate and comprehend the world. They try to believe and behave as they ought according to the identity of their religiously defined community (Downes, 2011:42-44: 232-235). Since norms don't refer to what people actually do, but what they ought to do, these are purely a mental and language phenomenon, and cannot be discovered from an empirical description of behaviour. Normative values are at least tacitly involved in all human action, so understanding how norms are internalized and applied is urgent. Prayer is perhaps the most important way, certainly the main conscious, personal way, in which religious norms can be deeply internalized, innovatively applied and hence widely disseminated.

2. Prayer as a theological problem

This essay will concentrate on Christian prayer, mainly because that is the tradition with which I am most familiar. What do we mean by "prayer"? Like all religious terminology, the sense of the word isn't precise. There are two basic aspects: first and most generally, contact with a more or less personal supernatural entity and second, and more specifically, 'talking' to a more or less personal supernatural entity. In sociolinguistic terms, the former conception is an *encounter,* focused co-presence, non-verbal or verbal; and the latter is verbal, a subset of the first (Goffman,1963). An important type of non-verbal prayer encounter is *contemplative prayer,* or *meditation,* paths to mystical religious experience.

In this essay we are concerned only with communicative encounters. It is worth noting that communication is not co-extensive with language. Any non-verbal encounter is communicative if it involves a behaviour which intends to convey a message (Grice, 1957; Sperber and Wilson, 1998). Therefore, any act, verbal or non-verbal, performed with the intention of communicating with God, can be treated as prayer. But we will analyse only verbal prayer.

There are further distinctions which can be drawn about the relation of prayer to its verbal medium on various simultaneous dimensions. A linguistic prayer can be silent, inner speech, or spoken aloud, either in private or in public. If in a public religious situation, prayer can be part of a collective liturgical activity. That activity can either be vocalized by every individual in a group, or by a prayer leader, in which case verbal prayer is a special kind of attentive listening (Downes, 1998: 319-320). On

another dimension, prayer can be spontaneous, or the recitation or reading of, respectively, a memorized or written text. Spoken liturgical prayer has distinctive sound properties, melding into chant, sung prayer and hymn. In literate traditions, prayers have been composed, written down, collected and translated, forming part of scripture and having special authority. On another dimension, prayer can be accompanied by non-verbal signs, outstretched arms, kneeling posture *etc.* On yet another dimension, that of dialogue*,* there is the question of 'listening to God' and the theological problem of 'answers'.

As D.Z. Phillips points out, to make sense of prayer is to come to understand the way that the language is used by religious believers. He claims that knowing how to use that language is to "know God". This is by virtue of the way that the concept, God, is relevant to prayer. Prayer presupposes a purported "knowledge of God" in the believer's conception of God. As opposed to contemplation and meditation, verbal prayer is talking to God – it is by definition oriented to the interpersonal function of language (Halliday, 1978: 21-22; 116-117; 144). Intended as verbal communication, it presupposes that God can be treated as a *pragmatic person* (Downes, 2011: 38). Since the term "pragmatic" refers to the use of language in context, especially communication, it enumerates just the necessary and sufficient properties of communicative competence. This is a defining property of "persons". It follows that prayer presupposes a personal God (is theistic) who must have the properties of one with whom, somehow, however mysteriously*,* it must make sense to communicate. Pragmatic personhood also opens the door to dialogue. Given this possibility, not only 'revealed' scriptures, but private thoughts that emerge into consciousness or even patterns within events, are often interpreted as communications from God, replies to prayer. This inner voice is not the same as 'hearing voices' in psychiatric contexts. If God is a pragmatic person, it makes sense both to "talk to God" and "listen to God". These phrases are often used in books on prayer and one needs to understand what is meant in these contexts.

It is the mismatch between God as a pragmatic person and other properties of God that creates the theological problem of prayer. If one takes God as a pragmatic person *literally*, then there is no problem. But this concept of God becomes almost unrecognizably humanized; simply a super-version of you or me. This might be the case in folk or popular religion. This God could come and go, learn new things and be surprised by them, change their mind in the face of arguments, pleading or promises, do special favours for me and not for you because I am God's favourite, and so on. For sophisticated theology, this is all idolatry. Therefore, the presupposition that God is a pragmatic person in the human sense must be merely an analogy. If this is accepted, then rationally working out the analogy is to grapple with a theological problem in its specialized context of situation and culture. There may be many different degrees of awareness of these problems, more or less relevant to actual people in the contexts in which they pray. Phillips talks about 'deep believers', who have a theologically sophisticated grasp of prayer, a group which must contrast with more naïve 'folk believers'. For this latter group, according to Phillips, prayer verges on superstition. There are also modernist concepts of God which many theologians to-day would reject because of the humanization of the concept (Hyman, 2011).

Phillips points out that the very possibility of the act of praying for the believer is definitive of understanding what the language game "talking to God" means (Phillips,
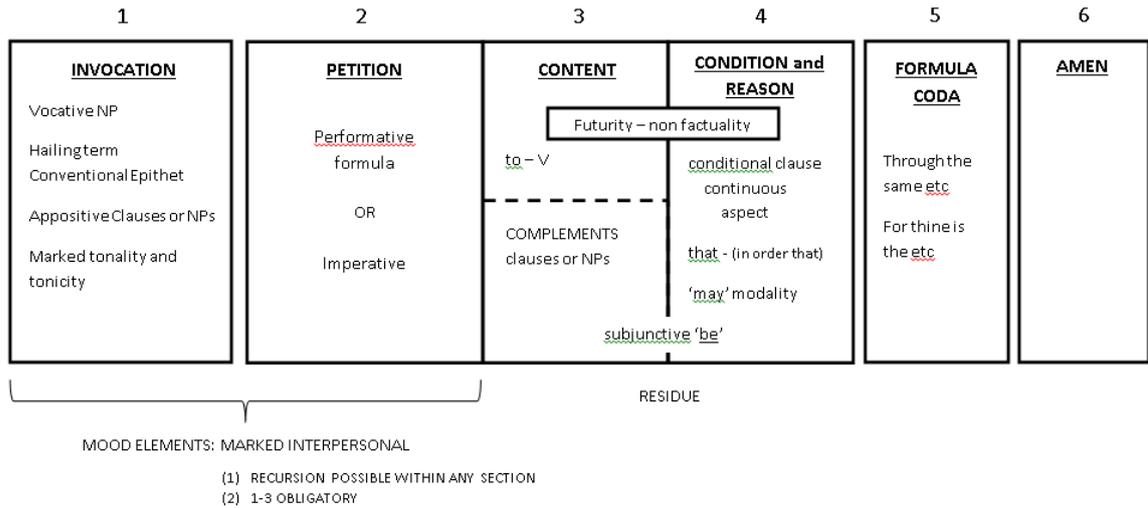
1981:37f). However, as linguists, we approach believer's understanding by 'bracketing' the objective felicity of their theological commitments, while still including them, when necessary, in our account of prayer. It is irrelevant whether the referent of "God" - or any other supernatural entity – is real or exists. *Qua* linguists, we neither say that they exist or don't exist. We represent only what believers do, how they claim to understand it, and how that relates to our theory of language, how it could have meaning in context. Bracketing the issue in this way is not the same as taking an atheist stance. Methodologically, we suspend judgement about the concepts, commitments and attitudes of those who pray, while grasping these through the process of *verstehen*, the intuitive understanding of human behaviour (Abel, 1960: 158). This is the scientist's application of their own mind-reading and empathetic capacities. This distinguishes our scientific approach from Phillips' philosophical theology, which, sharing commitments with its subjects, tries to find the best theological solution to the problem of prayer.

3. Functions and genres of prayer

Prayer has a number of traditional communicative functions. These include Invocation, Praise, Devotion/Worship/Adoration, Thanksgiving, Benediction or Blessing, Penitence, Petition, Remonstrative prayer of Complaint, Dedication, Intercession and Contemplative and Meditative prayer – more properly mysticism - mentioned above.

Except for the last, these should be thought of as types of communicative functions, to be distinguished from the way they are linguistically realized. A given prayer tends to weave more than one of these together in the same text. Even an estranging intonation can manifest an attitude of sacred separateness and awe in the function of worship. Realization takes the form of *generic templates*. These are ideal structures projected from culture which pre-code how to perform the situation type of prayer. It is by internalizing these genres that a believer learns how to pray, enacting the actual situations that make up their prayer life (Halliday, 1978: 133-134).

Petitionary prayer, often considered the most basic form of prayer, is the subject of this essay. In Figure 1., I set out its generic template. There is an invocation, a petition and its content which I claim are obligatory, with the *caveat* that there are cases, especially in inner and/or spontaneous speech, where the invocation can be structurally conflated with the petition, as the understood subject of an imperative, or the implicit or explicit indirect object of a performative. The relation of invocation and petition is a structure which is not a sequence. Although the invocation most often precedes the petition, it can be placed elsewhere; for example, interrupting petition and content. The condition, coda and amen are optional elaborations, characteristic of more formal written, liturgical prayer. In a prayer text, the functions and their structures are recursive.

1	2	3	4	5	6
INVOCATION Vocative NP Hailing term Conventional Epithet Appositive Clauses or NPs Marked tonality and tonicity	**PETITION** Performative formula OR Imperative	**CONTENT** to – V - - - - - - - COMPLEMENTS clauses or NPs	**CONDITION and REASON** Futurity – non factuality conditional clause continuous aspect that - (in order that) 'may' modality subjunctive 'be'	**FORMULA CODA** Through the same etc For thine is the etc	**AMEN**

MOOD ELEMENTS: MARKED INTERPERSONAL (for columns 1-3) — RESIDUE (for columns 4-6)

(1) RECURSION POSSIBLE WITHIN ANY SECTION
(2) 1-3 OBLIGATORY

Figure 1.   Generic Form of English Petitionary Prayer

3.1 Invocation

I outline the invocation function and its structure in Figure 2 The addressee, treated as a pragmatic person, can be either summoned or addressed, or the two can be combined recursively: for example, "O God! Thou art my rock, I seek thee…" Psalm 63: 1). If summoned, this is usually achieved, not by nominal address, and never with summoning intonation, but by a clause, most commonly an imperative: "Lord, hear my voice! Let thy ears be attentive to the voice of my supplication" (Psalm 130:2); "Come, O Holy Spirit," (Prayer to the Holy Spirit, *A Simple Prayer Book*, 1997: 10). But sometimes it is achieved by a performative: "Out of the depths, I cry to thee, O Lord" (Psalm 130:1); "I cry aloud to God, aloud to God, that he may hear me" (Psalm 77:1). The performative is rare in contemporary Christian prayer, but appears in both the psalms and the mystery religions of antiquity.
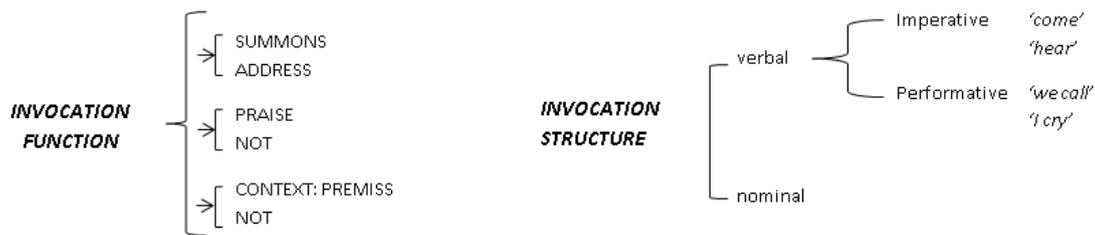

Figure 2.   Invocation: Function and Structure

More common is the complex nominal structure of invocation in Figure 3. This constitutes an inter-personal relationship by directly addressing the transcendent pragmatic person, who is treated as already conversationally present and doesn't need to be explicitly summoned. Consider the Invocation in the *Hail Mary*, a prayer which is itself recursively iterated in the rosary, a specialized member of the register of prayer. The effect of repetition in inducing altered cognitive states is well known. In

the prayer itself, the invocation is recursive. The iterated structures are italicized and tone group boundaries indicated,

> *Hail // Mary // full of grace // the Lord is with thee // blessed art thou amongst women // and blessed is the fruit of thy womb // Jesus // Holy Mary // Mother of God //* pray for us sinners // now // and at the hour of our death // Amen.

There are two separate nominal invocations in this prayer with "Mary" the head of both, the second expanded by the premodifying epithet, "Holy". These are vocative noun phrases which make explicit through a situated act of reference the supernatural addressee of the prayer, who is treated as conversationally present They presuppose an ontological commitment to the entity "Mary", which varies with the believer's explicit or tacit theology. Both invocations are elaborated. The elaboration of the first is extensive, consisting of one phrase – analyzable as a reduced non-restrictive relative clause - plus three further clauses in apposition. In the second invocation, there is one phrase in apposition, another reduced relative, "Mother of God", parallel to the first.
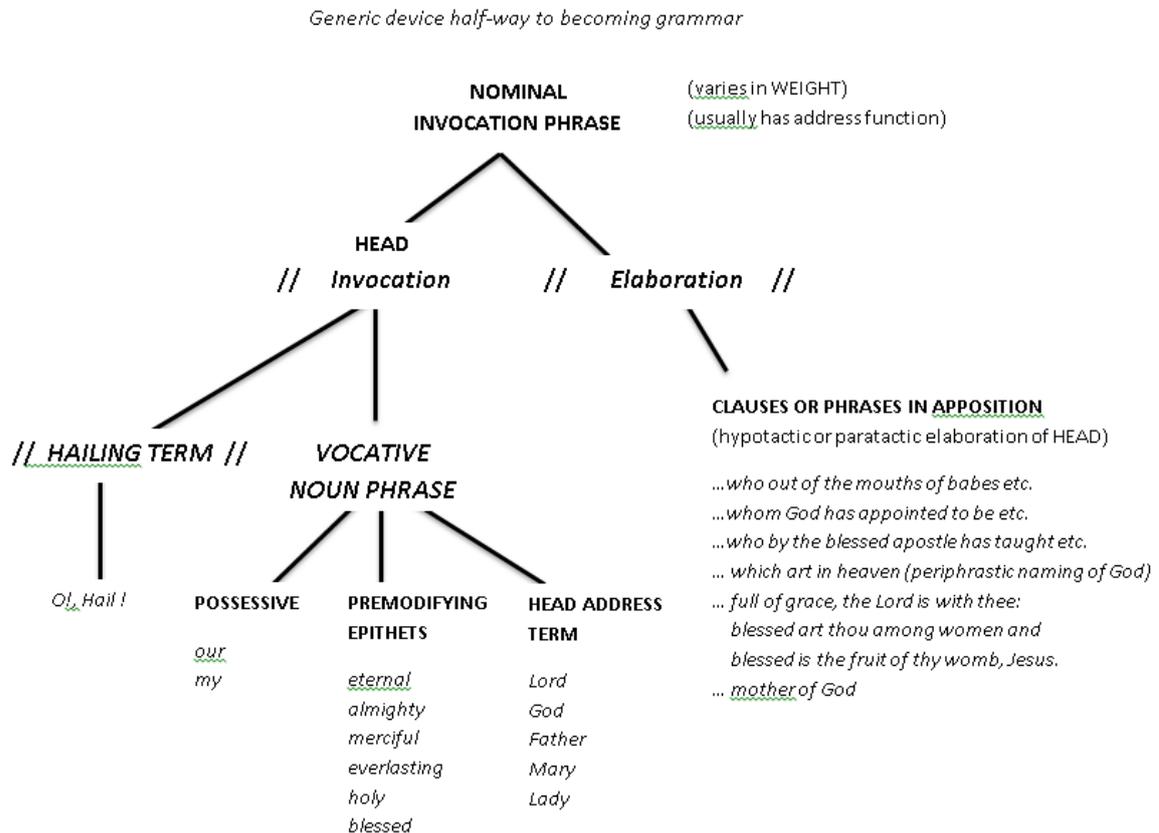
Figure 3.   Grammar of Nominal Invocation

Address always involves recognizing the relative status of the addressee (Brown and Gilman, 1961). Invocations can have such quantity, in Grice's sense, that they conversationally implicate an additional function, that of praise. Praise expresses obeisance to supernatural power by analogy with addressing a sovereign. We learn from this both how the possibility of recursion can itself be used to achieve a

cognitive effect and how the same structure can be relevant in two ways, fulfilling two functions, address and praise. At least three different social models or analogies for the addressee relationship are available; monarchical, familial and personal fellowship. The monarchical is the most power-oriented. By contrast, in the *Hail Mary*, the relation is both familial and personal, seeking Mary's nurturance through her intercession with her son. It is a gendered relationship. Elsewhere, she is the monarchical 'Queen of Heaven', the glorified Christ's royal consort. Recursion in the Invocation can also have another, third, function (see section 6. below).

Authoritative written prayers of a tradition, such as the *Shema,* the *Kaddish,* the *Lord's Prayer* and the *Hail Mary*, have histories. In the case of the last, it was "Originally purely an Invocation praising Mary based on Luke 1.28 and 42 … the Petition … '*Pray for us sinners'*… was appended by the Carthusians about…1350… receiving its definitive form along with the complete text of the *Hail Mary* in 1568 in the breviary of Pius V" (Jungman 1978: 109).

4. Petition and the imperative

Petitionary prayer normally has an overt Invocation. Petition is often said to be the primitive form of prayer and why this could be so will become clear. Petitions are realized in two ways, by the use of the imperative sentence type or by a performative formula containing one of a set of verbs of supplication: *"beg", "beseech","implore", etc.* The two ways can appear to-gether, as in "*Grant, we beseech thee…*".

Both linguistic forms have traditionally been considered humble requests, *directives,* which literally convey the force of that specific class of illocutionary acts. According to Searle and Vanderveken (1985:37-62: 179-216) there are five essential illocutionary points. In directives, the speaker attempts to get the hearer to carry out a future course of action. The primitive directive verb is "to direct". All the above performatives are included in this class. In terms of intentionality, this representation projects words onto the world, essentially using language to try to bring about a future state of affairs. Applied to petitionary prayer, this means that the prayer *literally* counts as an attempt to cause God to do something that he wouldn't otherwise do, by virtue of the recognition that the speaker intends to produce this effect. To be a genuine directive petition, the prayer must be intended to be the *reason* that God does the act in question. In summary, it is an attempt to get God to conform to the speaker's will.

I claim that this directive interpretation is the folk view of prayer. It is the relation that would be appropriate for a humble supplicant petitioning a prince, in order to obtain a favour in their gift. But, as we shall see, there are theological problems with this applied to prayer. Here also is the implicit relation of petitionary prayer to *spells*, formulaic texts which, when enacted felicitously, are words which have the power to control the supernatural, to conform it to the magician's intentions. The perlocutionary uptake of the directive for the supernatural is obligatory; that is the power of the utterance.

One of the reasons that petitionary prayer has been 'folk-interpreted' in these ways is that it seems natural to think that the imperative literally *means*, that is, encodes the

directive act. The performative formula paraphrases this literal force. This is a version of the 'performative analysis' of the sentence type (Ross, 1970). It means that to utter an imperative sentence would necessarily be literally understood as trying to get the hearer to do something, in the first instance. As long as the felicity conditions for the underlying performative are satisfied, it necessarily conveys that speaker intention - *Do A*. But this means that in many common uses of the imperative the underlying performative is always defective. Examples are granting permission or expressing a wish or a preference, without the intention of getting the hearer to do anything. Searle deals with this by introducing the notion of an indirect speech act (Searle, 1975).

Within pragmatics, alternative analyses are now available that don't assume that the imperative encodes a directive. Instead, the sentence types encode much less and communicative intents are conveyed uniquely in each context. In other words, the imperative is not equivalent to a performative formula. In Downes (1977) I argued that the semantic content of the grammatical imperative was exhausted by the representation of a state of affairs, hypothetical to the speaker, which must include a second person subject argument, whose referent, the addressee, is causally connected in some unspecified way if it is to become true. This semantic structure could be used to implicate any proposition consistent with it in a context. For example, it could be used to express a wish about a past state of affairs of which the speaker is ignorant: the speaker could have heard a loud bang from somewhere they can't see and say, "Don't have fallen again, please". This *can't* be a directive, yet is pragmatically well formed. Whether the directive was the unmarked use of imperatives would depend on culture.

In a similar vein, Sperber and Wilson (1995) develop a relevance theory account of the sentence types. In relevance theory, the speaker's informative intentions are inferred in each unique context according to the principle of relevance. This guarantees that in a communicative context the input will be optimally relevant. It follows that by processing for such relevance, the hearer will automatically determine what the speaker intended to convey. (In my own version of the theory, degree of relevance is a measure of the algorithmic complexity of the input to the hearer, where this is measured by the number of steps a Turing machine would require to derive it in context, Downes, 2012.). Since all input is automatically processed for maximal relevance, once the hearer is aware that there is a communicative intent, the information derived with the fewest steps is what was intended by the speaker. (The inferences are, of course, fallible.) In this approach, communication is independent of literally conveyed illocutionary intention.

However, from the point of view of utterance as action, Sperber and Wilson (1995: 246) recognize three basic acts - saying, asking and telling - associated with a wide range of different syntactic devices. The declarative, interrogative and imperative sentence types are only one such input device. What is intended by an utterance, beyond the fact of saying, asking or telling propositions must be inferred in context. Thus, in their analysis of sentence types, the imperative merely conveys, `*the speaker is telling the hearer to p'* (Sperber and Wilson, 1995: 251). They gloss such telling as: the thought 'that p' represents a desirable state of affairs.

All other intentions are inferred following the principle of relevance. This new analysis suggests that we interpret the supplicatory, or 'humble', set of performatives used in prayer - *beg, beseech implore, etc.* - not necessarily as directives, but likewise as representations only of what is desirable to the speaker. What happens with respect to the speaker's desire depends solely on the will of the overwhelmingly powerful addressee. There is no necessary intention to get this addressee to conform to the speaker's will; that would be presumptuous, not humble.

These alternative analyses are significant for petitionary prayer. They detach it from any necessarily literal connection with directives. Instead, the utterance is most intimately connected with desire, an affective-motivational attitude to a proposition. This is interestingly convergent with Phillip's (1981:121) claim that petitionary prayer is *really* only the expression of speaker's desires, without directive intent. However, Phillips restricts this interpretation to theologically sophisticated believers. He writes, "When *deep religious believers* pray *for* something, they are not so much asking God to bring this about, but in a way *telling* Him of the strength of their desires" (my italics). He goes on to say that they do this so that their desires, which may not be fulfilled, would not nevertheless destroy their lives. They are "asking to be able to go on living". This is presented as a solution to the theological problem of petitioning God as if he were a pragmatic person. So now we have two contrasting cognitive procedures with respect to petitionary prayer: the folk directive interpretation; and the deep believers' desire interpretation. One cognitive register has two interpretations.

These new analyses of the imperative when applied to prayer raise the issue of how desire, when it has as its object hypothetical states of affairs, relates to the other dimensions of religion listed above: the supernatural, normativity and rationalization. We now turn to this issue.

5. The imperative and the mind-brain's SEEKING system

Prayer is a cognitive register. But cognition is the operation of the whole mind-brain. It therefore encompasses not only thinking but also emotions, and not only the mind, studied by philosophy and cognitive psychology, but the brain, studied by neuroscience and other brain sciences. In fact, these studies are inseparable because methodologically, the functional identification and interpretation of brain physiology depends on psychology. Conversely, psychology itself changes as it confronts and integrates new possibilities arising from better understanding the brain.

The new analyses of the imperative claim it makes manifest desire. What is desired is made explicit either by, or inferable from, the propositional content of the imperative. My hypothesis now is that implementing desire through behaviour involves one of the mind-brain's most basic complexes: the SEEKING system, as described by *affective neuroscience* in Jaak Panksepp's 1998 book of that name. (I will follow Panksepp in employing caps to highlight his basic, well established, emotional systems.) The imperative is the linguistic realization of this system.

In the study of our emotional life, the distinction has long been made between *basic* and *secondary* emotions. Basic emotions are universal and innate and they are often related to the facial expressions by which all humans express them; a universal bodily semiotic. There are a number of inventories. Damasio (1996) lists 'happiness,

sadness, anger, fear and disgust' and Carruthers (2006) adds 'surprise' and replaces 'happiness' with 'joy' (Downes, 2000). Contrasted with these are the secondary emotions, in which the basic emotions have been conceptually shaped and interpreted according to context, and which are made manifest in our rich affective vocabulary. With respect to the phenomenology of emotion or "felt experience", I previously wrote that "emotions are construals of bodily states of arousal in contexts of situation and culture" (Downes 2000: 101). This refers to the secondary emotions, to the rich, unlimited way that the output of the basic systems is interpreted in context, made public to consciousness and disseminated, all requiring language. Only in this secondary sense can emotions be said to be sociolinguistically constructed. Very subtle feeling states can be made manifest, represented, interpreted and aroused in personal relationships, culture and politics. Although separate systems, emotions are connected to both empathy and mind-reading.

In his study of the affective structures of the mammalian brain, based on research into animals, Panksepp (1998) describes those systems which have been empirically well established in the literature: FEAR (alarm at threat), RAGE (frustration at restraint), SEEKING (motivation/ behavioural activation), the social emotions of CARE (nurturance), LUST (sex), PANIC (need for alleviation of threatened social loss, crucial for social attachment), PLAY (decoupled modelling behaviour), REM (decoupled dreaming). He suggests that there are others: for example, DOMINANCE – SUBMISSION. The literature portrays others such as "altruism" and "empathy" *etc.*. Neuroscience must be integrated with the other cognitive sciences, in this instance not least with the concept of modules. In Panksepp's analysis, affectivity is clearly modular. This also raises the possibility of the experience of mixtures of inputs and of secondary emotions which are inter-modular combinations of primary emotions; *e.g.* RAGE, FEAR and PANIC or CARE with or without LUST.

Panksepp (1998: 48) defines neurally-based systems which "can be used equally well in brain research and in...psychological studies" as well as "being capable of elaborating subjective feeling states that are affectively valenced", although it remains unknown how subjectivity is neurologically accomplished. These are some of the properties of basic emotions. First, they are genetic and automatically respond to life-challenging situations – unconditional responses to sensory stimuli which they then modulate. I would add that these genetic universal systems are *representations*, because they give the organism new *information* about the stimuli that elicit them. (In Downes (2000), I claimed that basic emotions are a semiotic.) Second, they generate instinctual motor outputs; *e.g.* facial expressions, fight or flight, expressions of sexual interest *etc.*. Third, they have positive feedback loops that give them a life independent of immediate stimuli. Fourth, they are modulated by higher level cognition. Fifth, they modify that same higher level cognition. And, sixth, they generate conscious feelings.

Although independent, all the systems are complexes that have high degrees of connectivity with each other and other systems. Four, five and six are the linguistically constituted secondary emotions of conscious experience, to the degree they are not ineffable. We struggle to articulate much emotional complexity and unstable inter-modular feelings where there is no obvious lexicalization of the purely emotional mental representation. But the available linguistic re-representations construe basic emotional representations by relating them in the maximally relevant

way to context. For example, the FEAR system situated in the context of an examination, is named "exam anxiety", and so on.

Let us now consider SEEKING. First, this names a distinct neuro-physiological system which is concentrated in the *lateral hypothalamic* or LH corridor and corresponds to the neuro-chemical DA *dopamine* circuits. It responds to regulatory imbalances in general. Its stimulation "provokes the most energized exploratory and search behaviour an animal is capable of exhibiting" (Panksepp,1998:145. The system is described in detail in Panksepp chapter 8). Second, the system is like a column which extends across two of the three levels of the mammalian brain, the old mammalian mid-brain and the new mammalian *neo-cortex*, affect-motivation and conceptualization, respectively. This is a neurological parallel with the basic-secondary emotion distinction. Third, the system responds to specific goals, such as a *homeostatic imbalance* or input from systems such as FEAR or PANIC, but it also functions independently of any specific goal, in pure exploration.

SEEKING is interpreted cognitively by Panksepp (1998: 52) as an "appetitive-motivationl system, which helps elaborate energetic search and goal-directed behaviours on behalf of a variety of distinct goal objects". It "mediates 'wanting', as opposed to 'liking'". He writes, "The SEEKING system appears to control appetitive activation –the search, foraging, and investigatory activities – that all animals must exhibit before they are in a position to emit consummatory behaviours" (Panksepp, 1998: 146). The system itself is so subjectively rewarding, *more so than any actual consummation,* that animals will self-stimulate it until they are exhausted, this in the absence of any specific desire, any goal. Finally, with respect to humans, Panksepp (1998:145) proposes that "This harmoniously operating neuroemotional system *drives* and *energizes* many mental complexities that humans experience as persistent feelings of interest, curiosity, sensation seeking and, in the presence of a sufficiently complex cortex, the search for higher meaning". Translated into specifically human intellectual culture, this autonomous exploratory instinct leads the species-mind to inquiry of all kinds.

5.1 The emergence of petitionary prayer

How then does SEEKING relate to petitionary prayer? I suggest that two kinds of SEEKING are involved. First, by *telling a desire* a specific goal is articulated, opening up all its possible implications in context of culture. But second, the principle behind prayer is the pure activation of SEEKING a transcendental God, who is the ideal end of all inquiry. Of course, because transcendental, this consummation is impossible. Concepts like God are relevant mysteries which can be re-interpreted and applied in new contexts without limit (Downes, 2011).

Furthermore, there is a natural connection between the SEEKING system and the emergence of the supernatural. In Downes (2011: 78-82), I show that the inferential path necessary to achieve any given goal, because it is maximally relevant, generates a possible inference that the world is 'intentional' in the sense that it 'represents', is 'about', goals that humans want. This is because, if the desired goal is achievable, there in fact *must* be an inferential path which is maximally relevant with respect to its achievement. Therefore, it must appear to the mind/brain that the input from the world represents human beings in such a way that they can*,* or in some cases cannot, achieve

their desires. To be successful the inferential path must contain truths. It follows that the mind/brain would SEEK to discover whatever unseen intentional power lies behind these truths that enable it to achieve what it desires.

This gives us an account of the emergence of both prayer in general and its petitionary form. They emerge in cultural evolution when it becomes possible to grasp the apparent abstract intentionality of the world with respect to goals. The mind-brain SEEKS the mind-like supernatural entity behind this 'aboutness' - this mystery that appears to represent it - that both enables and frustrates. Within that overall SEEKING, the most urgently specific goals to be sought are the objects of those desires most relevant to the speaker or the group, that most deeply motivate them in context, or in general. These provide the semantic content of petitionary prayers.

But the transcendent intentionality also relates to *all* the basic emotions in complicated ways. This leads to the various functions of prayer. It is itself the deepest alleviation of PANIC – metaphysical loneliness – and postulates CARE, nuturance, by the supernatural. This leads to prayers of intimate devotion and thanksgiving. FEAR manifesting itself as metaphysical awe and terror at an unknowable power governing all reality – Otto's *mysterium tremendum* - that enables or frustrates all goals, motivates attempts to placate and submit (Otto 1958/1923: 12-24). FEAR may manifest itself as prayers of adoration, praise and submission. RAGE might lead to prayers of complaint and accusation, SEX for passionate, orgiastic union with the supernatural other, guaranteeing fertility, as well as physical intimacy. Functions and genres of prayer can thus be correlated with the various affective systems. Taken together, these emotionally constitute prayer, or worship, with respect to language as a class of secondary emotions. Religion is about feeling. These create a context for petitionary prayer in terms of a developed affective attitude to the concept, God.

It follows that prayer naturally originates as a *"hegemonic"* register within culture (Fowler 1996: 191-196). I use this term in Gramsci's sense (Forgacs: 189-222). Therefore, it means that prayer's claim to efficacy is accepted consensually within the dominant cultural grouping. This makes it indisputably normative. However, I further suggest that, in western modernity, prayer no longer has that hegemonic status. It has become a *subaltern register* in an overwhelmingly secular context of culture (Taylor, 2009). To pray now conveys only subcultural identity.

Fowler's more purely 'linguistic' diagnostic is when hegemonic, a register is not mixed with other registers within "plural texts", but has a clarity which aims at absolute authority over the addressee. He uses prayer as an example. I would dispute this. (I would propose that the *plain style* of Standard English prose is an example of hegemonic register.) *Contra* Fowler, I suggest that evidence that religious language is a subaltern register is the incomprehension it provokes. Phillips notes that for many secular intellectuals "one is at a loss what to make of prayer" in a context where "religion *means* nothing to one" (Phillips, 1981:19 my italics). The diagnostic of whether a register is hegemonic or subaltern is not textual but cognitive clarity, believing one really can achieve relevance using that genre, knowing what one sincerely – not just playfully - ought to do in context.

5.2 Problems with interpreting the directive analysis

As noted in section 2, there are theological problems taking prayer as a sincere directive; a literal attempt to change God's will with words. God must be the sort of pragmatic person who is a language user, who can be informed of new information because there are things he doesn't know, to whom one can issue a felicitous directive and who sometimes can 'change his mind' because of this, intervening to produce an outcome that would not have occurred unless believers requested it.

These divine attributes would naturalize or humanize the concept, God, in a way that is theologically inconsistent (Phillips, 1981: esp. 81-130; Hyman, 2012). Not only does this interpretation make a prayer very close to a 'spell', words that magically control events, and hence mere superstition, but it has morally disreputable and dangerous consequences. This is because God's uptakes would then appear arbitrary; for example, when he saves one life and takes another. Why did the prayer fail in the one case and not the other? Gavin Hyman (2012), in his recent book on atheism, claims that this naturalized God is a quite recent historical product, the result of accommodating theology to scientific modernity. Compared to the more transcendent earlier concept of God, analogy in theological language in Aquinas' sense is almost lost. Consequently, if an imperative is taken as a directive, it must be either literally efficacious in changing the world, as in Brümmer (1984), or merely therapeutic as in Kant (1960/1793:182-185).

But because of the pragmatic analysis of the imperative, we are in a different linguistic position in which to view the speech act semantics of the utterance. It is not *necessary* to think of it as a directive at all. It becomes natural to view an utterance of an imperative simply as the SEEKING system making manifest in language the desirability of the hypothetical goal represented by the content of the imperative. Prayer is simply a manifestation of this "wanting", in Panksepp's words. But must this also necessarily be an attempt to change the world? What is the relation of SEEKING to the directive interpretation? What is the input to understanding the relevance of the imperative to the speaker and their intended addressee (their concept of God)?

In the pragmatic analysis, to take an imperative as a directive becomes less relevant than to construe it as 'telling desire'. To intend the utterance of a prayer as a directive, not only requires more cognitive work to achieve relevance, but leads to the inconsistencies just mentioned for the theological concept, God. Therefore, with respect to prayer, a 'telling desire' interpretation is preferred on contextual grounds. If directive intent is also present, it is 'added on'.

However, I claimed above that a directive intention is the folk way of prayer. So why would a naïve believer do the extra inferential work? On the face of it, only if the believer thought either that the supernatural can be persuaded, or, worse, magically compelled to do something they otherwise wouldn't by the prayer, would it be inferentially worthwhile to intend it as a directive. This may indeed be the intention behind much naive petitionary prayer. But in fact, if a believer regularly intends directives whose results are largely a matter of chance, the likely outcome over time

would be either to blame either God or oneself for the failures or coming to realize that petitioning is pointless.

So we need another reason for the folk interpretation. The SEEKING system energizes motivation with respect to desires. It generates exploratory action with respect to goals. This might be termed "will". So we need to distinguish the affective state of desire, wanting, from actual motivation, the will. When the imperative makes manifest SEEKING, it tells desire, but it can also manifest the *will* that the desired state become true. If it is believed that this can be accomplished through words, it can lead to directive intention, using the words to try to achieve the goal. But this is not necessary. It can just make manifest what the SEEKING system wills as a corollary of its desired goal, without attempting to actually achieve it, in that context. It tells what is desired, therefore would be willed, but doesn't necessarily act wilfully by expecting the hearer to bring it about. Alternatively, it could wilfully intend the directive.

(The difference between desire and will is a transition from affect to motivation within SEEKING. It is the *logical* separation of the two aspects of SEEKING, affectivity, the *desire*, and the energized motivation to achieve it, the *will,* that allows normative *inhibition* to intervene in behaviour (Downes 2011: 28-30; 42-44;91-95). This enacts the censorship function of normativity, unconsciously or consciously – if the potential violation is especially problematic. The mind doesn't inhibit spontaneous desires, but motivated by norms, it wills that an energized SEEKING system not act out unwanted desires. This is sometimes called "cortical or impulse control".

Manifesting will by trying, however futile, to get what is willed, is stronger that merely telling the desire behind it. If a desired goal is *so relevant* to the believer that they intend to will it by using the imperative as a directive aimed at God, theological inconsistency just doesn't figure. The imperative can be intended as a directive. It spontaneously expresses the force of the believer's will. The will to achieve the object of desire testifies to the strength of the desire. So the directive folk interpretation makes manifest an unruly will in a way that the deep believers' mere telling of desire doesn't. The directive intention spontaneously expresses the power of desire and the wilfulness of the believer. The longer term process of a prayer life is to effect a change in that wilfulness.

In the next section, I will try to show that even so, petitionary prayer never functions in terms of God conforming to the speaker's will, but that it pragmatically functions, automatically, to achieve the psychological opposite; to conform the believer to their concept of God's will, transforming their wilfulness. Theologically, in petitionary prayer they come to understand God's will. It follows that Phillips' "deep believers" conceive of prayer differently, not because they are more theologically sophisticated., but because their wills are already more 'broken' by religious norms.

6. Petitionary Prayer and SEEKING.

The next step is to apply our analysis to petitionary prayer. As we said, an utterance is always performed in a context of situation. In Figure 1., the invocation phase of prayer, combined with other semiotics, for example, posture, provides a discourse marker which initiates the register constituting the situation. Simultaneously, frames of religious assumptions, canonical texts and previous explications and prayer

contexts become the mental encyclopaedia's most accessible information. (In public prayer, the beliefs and observable behaviour of the religious community also become very accessible.)

There is also an *affective context of situation.* First, the SEEKING system is aroused in the context of attitudes towards the concept, God, the hearer. In the theology of prayer, these attitudes are the gift of grace, which enables prayer. Before SEEKING the specific content of any petition, the SEEKING system is first fundamentally oriented to "SEEKING God" – depending on how the concept is understood.

So in addition to its earlier mentioned roles, the Invocation provides a device for mobilizing appropriate attitudes lexicalized as "awe" and "respect", "devoted love", "confident intimacy" and "friendship". These are the linguistically interpreted outputs of social emotions, originating in the PANIC and NURTURANCE systems. In social terms, they motivate solidarity with power. These attitudes are expressed either minimally through the address term or much more fully. Compare the Hail Mary to the simple Lord's Prayer's, "Father in heaven". In addition to this function, the Elaboration phase of the Invocation also affords a slot where context for the petition can be explicitly pre-accessed, becoming already accessible for calculating the relevance of the following petition.

Next comes the petition itself. It makes manifest a second level of SEEKING. This is the desirability of the content, which the speaker SEEKS and would will to become true if that was possible.

But the minimal context of the petition is not complete. We can ask, what other factor *must* be assessed in every utterance of an imperative, where we *tell* the hearer p? This factor is the will of the addressee regarding p, which determines the relevance of the utterance for them. For example, if the speaker makes manifest a desire they believe is inappropriate to a hearer, the intended message is affected. Petitionary prayer does not merely make manifest the speaker's desire and will. It co-ordinates *two* loci of desire and will, the speaker's and God's as they conceive the latter. These differ in that God's desire and will is not only *not* the same as the believer's but is assumed to *always* take precedence over the latter. (This is true even if – within the bracketing convention - both are solely part of the believer's mental life because there is no God.) The *affective* context unconsciously *motivates* the speaker to conform their will to their concept of God's will and therefore to discover what this is, what God desires, with respect to what they themselves desire in each unique context. On the conceptual level, the theological context interacts with the speaker's affective motivational context. Prayer is a device for conforming of wills. Or rather for enforcing their concept of God's will on the believer's own will. There are two levels of SEEKING: first, the believer SEEKS God's sovereign will with respect to what they desire because they love God above all; and second, the believer SEEKS what they specifically desire. In petitionary prayer these two are mediated and conformed. This may require the frustration or inhibition of desire that the believer would otherwise will.

6.1 The workings of the cognitive register: general principle

The hypothesis is that prayer is a device for conforming the speaker's will to God's will. This happens if one prays sincerely, *irrespective* of whatever else one thinks one is doing (see below for a caveat).That is the socio-cultural function of the cognitive register. This happens whether or not the speaker is conscious of it, as long as the speaker is a sincere SEEKER after God as they conceive that transcendental goal - on an affective-motivational quest for God - in the context of their other desires. There is no difference in this respect between Phillips' deep believer and the folk believer. If you are fully involved with prayer, these psychological processes will occur at least partially below the level of consciousness. That is what is meant by the claim that prayer is always answered.

Now we will examine four cases where the speaker's assumptions with respect to the generic input vary in the context. Any division into types is of course very artificial because distinctions can be drawn on many dimensions. First, however, we can state a general principle of petitionary prayer. This is that the believer is prohibited from SEEKING – manifesting a desire and the will that it be accomplished – that they believe contravenes their religious norms. This has the effect of submitting problematic desires to normative evaluation, sorting passions into those that can and can't be told in the petition. This is a powerful norm enforcement device, even before a petition is formulated.

6.1.1 First case: the self-enacting dimension

Very often the act of praying itself brings about the object of the petition. The form and content of the prayer are such that to sincerely make manifest the desirability of p achieves it (Phillips, 124-128). The simplest case would be to make explicit the content of the desire, for example,

"Lord, strengthen my love for you".

If this is sincerely uttered, it makes manifest that the speaker desires the very outcome that is produced by the act itself. The speaker's love strengthens, becomes more available as a motive. More complicated cases occur where an outcome which is only inferable from the content is accomplished in this self-constituting way. Because self-constituting, these prayers are performative utterances.

Of the traditional seven petitions in *The Lord's Prayer,* at least three, arguably, have aspects of self-enactment. These are: *"hallowed be thy name"*; *"thy will be done on earth as it is in heaven"*; *"And forgive us our trespasses, as we forgive those who trespass against us"* (*Common Worship*: *Daily Prayer*: 816). These make manifest three related desires: first, that God's name be treated as holy; second, that God's will – his kingdom – be conformed to here and now; and, third, as part of this kingdom, to forgive our moral debtors, just as God forgives us for our moral debts, admitting us to his kingdom. These petitions self-enact what the speaker believes is God's will on earth through "hallowing" and "forgiving". Sincerely uttered, they manifest the will to conform to God's will. Therefore, God's kingdom, as conceived in the prayer, is partially brought into being through its utterance.

Self-enactment also requires that the content be conceived of as God's will. Thus, if the believer prays for something irrelevant to God's will, "Lord, let me win the lottery", or where God's will is unknown, "Lord, let me recover from this illness", these do not achieve what they desire.

6.1.2 Second case: inferential self-enactment.

Consider two wills: that of the speaker and that of God. There are many cases of prayer where God's will with respect to what the speaker desires is known. Since a believer desiring what they already know is God's will, such prayers could *never* be intended as directives aimed at God. To freely make manifest a desire for what you know the hearer wants you to ask for, is an act of assent or active conforming. For believers, God's will is known through scripture and traditional teaching.

In these cases, God's known will is the first premise in a deduction. The second premise is a desire for the first premise. The conclusion is the fulfilment of the desire, therefore God's will. The first premise can be stated as a conditional, the second as the desire, the conclusion being the consequent of the conditional. A simple example of this structure might involve the teaching that God wants his people to ask for his forgiveness to which he will always respond. The form of argument would be:

Premise 1. Conditional which states God's known will.

If anyone sincerely fulfils such and such condition X, God will Y.

Premise 2. The speaker's alignment with God's will.

The expression of a sincere desire for X.

Conclusion. Inference that God's will is achieved by 2.

Thereby Y.

The genre of the *Collect* commonly utilizes this type of underlying argument. Consider the Collect for Ash Wednesday (*Common Worship: Daily Prayer*: 371),

Almighty and everlasting God, you hate nothing that you have made and forgive the sins of all those who are penitent: create and make in us new and contrite hearts, that we, worthily lamenting our sins, and acknowledging our wretchedness, may obtain of thee, the God of all mercy, perfect remission and forgiveness …

This prayer asks for what is God's known will. The appositive expansion of the Invocation creates a context for the petition. This presupposes God's known will which can be recast as a conditional. The imperative manifests the speaker's desire that God make the speaker's heart contrite, a synonym of "penitent", which satisfies the known condition for forgiveness. If the imperative is to be sincere, the believer must be, or become, genuinely contrite or penitent. Theologically, although God hates *our* sin but nothing *he* has made, it is God's known will that the believer be contrite and so forgiven. Thus, if God is asked for this he will not refuse. It follows that the believer is forgiven. This prayer is a type of self-enactment - to sincerely make

manifest the desire for God to create contrition ought to be sufficient to induce it as a secondary emotion. This self-inducing is again a kind of performative utterance. In addition, the conclusion expresses feelings of reconciliation, satisfying the needs of the PANIC system.

If a believer's sincere desire for a state of affairs which is God's known will is sufficient to bring it into being, then all petitions asking for it have the potential to be at least partially self-enacting. Even though *"Thy Kingdom Come"*, does not bring about kingdom wholly, it partially constitutes it by here and now aligning the believer's will with God's.

6.1.3 Third case: God's will is inferred in context of the speaker's desire

This is the case where the speaker believes that they don't know what God wills with respect to the context of the petition. Psychologically, it is perhaps the most important form of the cognitive register. The believer may or may not be sophisticated with respect to their faith, but since in prayer we deal with pragmatics, the problem is always the context and its relation to thought and feeling. In the case of petition the feeling relevant to the context is the speaker's SEEKING in the context of a relevant lack. SEEKING where lack is irrelevant is more likely in cases of praise or thanksgiving.

My analysis is that the affective dynamic of this type of petitionary prayer over time leads to the contextual exploration of God's will and conformity to it. The cognitive mechanism for this is through the formation of hypotheses drawn or inferred from God's known will, accessible in the believer's encyclopaedia and publically available in scripture, tradition and discussion. This information, conjoined with the petition and what actually happens, warrants the new conclusions about God's will in the context of situation.

Consider that one is unemployed. In petitionary prayers the believer manifests their desire for employment now. They do all they can to find a job, but their efforts remain unsuccessful. God's will for them in this situation is genuinely unknown. If they then find a job, then all is well and good. They may conclude God has 'answered their prayer'. Indeed, the prayer may have energized personal confidence as a factor in the positive outcome, indirect self-enactment. Apart from such cases, let us assume there is no causal correlation between the desire made manifest in petitonary prayer and what subsequently happens. So when no job is found, the believer is emotionally in a quandary. Their prayer is unanswered. But why? Whose fault is this? As noted above, this is a problem with the interpretation of the prayer as a directive.

The believer may make this quandary manifest in a prayer of complaint, as in *Psalm* 22, "Why have you forsaken me?". However, religious concepts include the norm that although one might accuse God, one *ought not* do so, even in extreme distress, but trust him in spite of this failure, unconditionally. There are the examples of *Job,* Christian saints, Jesus himself in *Gethsemene*. The norm is that trust in God ought not to be affected by evil in the world. Like reality itself, the individual is utterly dependent on God's good will. Therefore, in order to be able to perform petitionary prayer which doesn't end in accusing God – or themselves - the believer must trust that ultimately, irrespective of what happens with respect to what they want, God is

always actively SEEKING them and their ultimate good. They have 'faith', therefore, whatever happens, all will be well.

This trust is the standard against which the believer SEEKS to interpret in their continuing prayer the inability to find work. They may be able to deduce their experience from the hypothesis that God permits their suffering as a 'cross', learning about their relationship with him in context and developing both patience and empathetic understanding of the suffering of others. They may suspect that it is simply just retribution for their past sins. They may confront the theological problem of evil. They may come to understand the situation in political terms, as a result of human social arrangements which are contrary to God's will – the poor, the orphan and the widow of the Bible. They may be motivated to change the world so that it accords with the justice of God's kingdom. They may understand the situation in a theologically sophisticated way. For example, they may read D.Z. Phillips and conclude that God is bracketed from '*how* things go'. Instead, their petition serves merely to make manifest those desires that might destroy them – their love of God - in the face of a failed petition (Phillips, 1981: 121). They may consider Simone Weil's argument, cited by Phillips, that suffering is built into the world to make people realize that they are "nothing". These are the sort of implicatures that might be contextually available to achieve relevance and be interpreted as answers to prayer. It is obvious that the actual possibilities are without limit. These propositional forms also structure secondary emotions as attitudes to them; for example, contextual feelings of indignation, acceptance, determination or confidence with respect to this limitless semantic content.

Petitionary prayer thus integrates religious assumptions into a personal situation with respect to both desire and the affective relation with the concept of God, where these are not the same. This holds irrespective of whether, theologically, God is active in how things go in the world. *Most important, prayer becomes a mode of inquiry.* It serves SEEKING through inquiry which aligns personal desire and the overarching desire for God, in contexts which intersect personal lack and religious teachings. Psychologically, the individual will becomes aligned with God's will, as the believer comes to interpret it, in the most important contexts of situation in their cultural lives.

6.1.4 Fourth case: the community of prayer

So far we have analyzed the cognitive effects of prayer on individuals, without considering the role of other believers. But religion is always social. In the fourth case, we examine prayer where others are part of the context of situation.

Prayer is often public, not least when integral to liturgy. These prayers are also central to a believer's prayer life. In public contexts, petitions are unlikely to achieve relevance through long, remembered and revisited, chains of inference involving private information and desire. Liturgy is repetition. A prayer within a liturgy repeats what has been uttered many times before; for example, psalms, canticles, litanies, the Lord's prayer. It is entrenched in the collective encyclopaedia. I propose that collective prayers in liturgies achieve relevance mainly by virtue of the input of witnessing other believers uttering the same thing. It is like singing in a choir or marching in step.. Each individual simultaneously makes manifest to each other the same epistemic, ontological and normative commitments, and does so repeatedly.

With each repetition, this strengthens just those representations which are definitive of the religious group. If the prayers are also self-enacting, as many liturgical prayers are, both the expression and the achievement of the desires is done collectively. Most importantly, in affective-motivational terms, believers co-ordinate desires and wills. In this case, we find the self-enactment of an "imagined community". (But does this public co-ordination also make group beliefs appear more uniform than they are?)

Intercession is another petitionary prayer which necessarily involves others. We can distinguish two types, analysed by Phillips (1981: 126-128). In the first type, the believer utters a prayer of petition for some state of affairs most relevant to a beneficiary who is a member of the community. The beneficiary may or may not know that they are being 'remembered', and if the latter, may have either asked for this or not. Imagine the case where someone is about to undergo surgery and the believer says, "I'll be praying for you". In this case, the prayer makes manifest that two wills are identical with respect to a shared desire. This knowledge strengthens the community, the beliefs involved in the petition, and may psychologically – a kind of self-enactment - increase the chances of a successful outcome. If the beneficiary doesn't know that they are being remembered, the effect is confined to the believer and any other participants in the petition. In practice, an absent member of an imagined community may know, without being told, that they are being remembered.

Finally, we have the case of intercessions on behalf of those who are *not* members of the community. Phillips (1981: 128) cites Christian prayers "for the conversion of the world". The Anglican "cycle of intercessions" (*Common Worship: Daily Prayer*: 328-329) includes those for, "Those in authority, for the right use of power"; "That humankind will care for creation"; "Victims and perpetrators of violence, for healing and repentance"; and so on. In public prayer, these manifest the imagined community's collective desire and will. If sincerely uttered, if not hypocritical, the intercession coordinates and strengthens shared norms. It creates a context for thinking how specific outcomes might be enabled, motivating social action, political or economic. Collective epistemological and attitudinal self-enactment creates the potential for action. Such prayer is perhaps a weak version of the vow within the Ghandhian tactic of *Satyagrahi* – commitment to truth, energized by love - constituting the non-violent resister. This is a refusal in contexts of situation and culture to do what is repugnant to conscience and effect change through redemptive suffering (Caygill, 2013: 74; 110-115).

7. Linguistics *v.s.* interpretation in philosophical theology

Linguistics confines itself to the analysis of the patterns of language, including possible ways that language functions in contexts of situation, while bracketing or remaining indifferent to the philosophical problems, the consistency or inconsistency, the truth or falsity, of how the text is interpreted by participants. The range of socially available interpretations and their philosophical problems are part of Firth's "context of culture". This clarifies the distinction between cognitive register and Wittgenstein's idea of a "language game". Philosophy describes and clarifies the context of culture with respect to conceptual confusion. By contrast, linguistics accounts for the social, psychological, and semantic/grammatical aspects of the language in which the interpretative problems present themselves to consciousness.

7.1 'Language Games'

The philosophical description of a language game such as prayer explores how the linguistic patterning can be strictly interpreted 'in its own terms'; that is, theologically, to clarify its meaning within its context of culture.

Consider Kierkegaard's (1989/1849: 71) description of the presuppositions of prayer,

"In order to pray there has to be a God, a self – and possibility, or a self and possibility in the cogent sense, for God is the fact that everything is possible, or that everything is possible is God …. The fact that God's will is the possible means I can pray: if God's will is only the necessary, then man is essentially as dumb as the beast."

Kierkegaard argues that to overcome despair and become truly themselves, Christians have to become conscious that it is possible for them to conform their will to God's, absurd as this seems to reason. Only then - "before God" - can they become authentically themselves. And thus, "The *believer* sees and understands his undoing … in human terms, but he has faith …. The manner in which he is to be helped he leaves wholly to God, but he believes that everything is possible …. Then too, God helps him, perhaps by letting him avoid the horror, perhaps through the horror itself; that help unexpectedly, miraculously, divinely turns up." With respect to the concept of the miraculous, that "depends on with what passion of mind he has grasped that help is impossible, and …how honest he is towards the power which nevertheless helped him" (Kierkegaard 1989/1849: 69-70).

Alternative theological interpretations of the meaning of the cognitive register of prayer are different language games. We have alluded to three: the 'folk' or directive interpretation, Phillips's argument that prayer makes manifest the speaker's desires with respect to a world in which God does not regularly intervene and Kierkegaard's view that, in the light of the leap of faith, prayer presupposes that everything is possible for God. These alternative interpretations of prayer are alternative language games played within the cognitive register – the problems it presents for philosophical theology. By contrast, cognitive register itself is an analysis of language use from outside 'faith' using the linguistic and cognitive sciences. It describes the empirical linguistic conditions which are input to these interpretative problems. This is the role of 'bracketing' and prevents linguistics becoming theology. We can talk about a "Wittgensteinian theology", such as that of Phillips', but not a 'scientific' linguistic theology.

7.2 Language functions irrespective of theology

We said above that prayer as "talking to God" presupposes that God is a pragmatic person. The issue then arises of the consistency of the concept, God, also being a language user with respect to human beings. This is a matter of theology, not for linguistics. In polytheisms and aboriginal theistic religions the same problem would present itself in different contexts of culture.

If the God of theism is treated as having *all* the properties of a human communicator, then the concept becomes fully naturalized, and in this respect God is like a human

person. Therefore, given the properties standardly attributed to God, this results in inconsistencies. Therefore, the theology of prayer consists of attempts to reconcile the two concepts within a single language game. Since the concept of God is a relevant mystery, and hence is constantly being re-thought in differing ways, there are an unlimited number of possibilities. In any case, rationalizations in religion remain un-decidable. The theology of prayer that best reconciles the two sides of the analogy, relative to a historical cultural context, will best enable believers to pray. It is not our job to consider theological approaches.

My core hypothesis was that the cognitive effects of prayer with respect to norms are achieved irrespective of theology. I need now to enter a caveat. For this to be accomplished, believers must unconditionally SEEK a supernatural entity that they believe is not malevolent and that reciprocally SEEKS them and their well-being with respect to religious norms. (Their concept of God must have at least these properties.) This relationship is the essential context determining the relevance of all their other desires. In conforming to God's will, persons model their lives on this mutual SEEKING. If these assumptions are sincere, prayer achieves its normative effect irrespective of how else God is conceived.

8. Conclusion

Petitionary prayer is a cognitive register, a variety of language used in context which has cognitive outcomes with respect to thought, feeling and action. Processing the genre of prayer manipulates the mind-brain so that it conforms the speaker's will to what they believe is God's will, depending on how they conceive God. The religious mind-brain becomes motivated by culturally shaped emotions and motives to desire and will, and therefore behave, according to the religious norms which constitute a form of life. The cognitive register organizes motivation, manages and interprets unruly personal desires and wilfulness, in the light of religious norms. It may be thought of as a *technology* which employs language.

Prayer as a cognitive register has a number of integrative functions. It integrates the four dimensions of religion - the supernatural, the normative, the affective-motivational and rationalization - and, using inference, applies them with respect to action in specific contexts. With respect to affect, it integrates and manages the diverse complexity of emotions and mobilizes them for action. Since each dimension of religion derives from a different module of mind, prayer serves inter-modularity, creating connections that 'tie together' the mind-brain. This integration is achieved by culturally introducing into the individual mind-brain *a variety of language as a device from outside* - a cognitive register from the context of culture. This also integrates the individual and the group. Lodged in individual mind-brains, it co-ordinates individuals' practical actions within a society according to religious norms. On a personal level, it integrates the phenomenal self of conscious 'felt experience' with the public person, a member of a co-operating group sharing the practice of prayer and hence enacting the same religious identity.

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