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# Transliminality: A Fundamental Mechanism in Psychology and Parapsychology

## MICHAEL A. THALBOURNE

Abstract: The concept of transliminality has been variously defined, but usually with the implication that it involves greater incursions from the subliminal consciousness, "across the threshold", into supraliminal awareness. The concept was derived from a series of factor analyses and eventually embraced the variables paranormal belief and experience, mystical experience, creative personality, manic experience, magical ideation, absorption, fantasy proneness, hyperaesthesia, and (positive) attitude towards dream interpretation. This paper reviews the evidence and conceptualization leading to the concept of transliminality. It analyses the various constituents of transliminality, suggesting its relevance to psychological and parapsychological research and to the concept of psychosis.

**Keywords:** absorption, consciousness, creativity, mystical experience, paranormal belief, psi, psychopathology, psychosis, transliminality.

#### Introduction

The relationship between belief in the paranormal, mystical experience, creativity and psychopathology has been the subject of much discussion (see, for example, Claridge, Pryor & Watkins, 1990). The general consensus is that there is a relationship between all these variables, but further evidence to that effect is desirable. To that end, Thalbourne and Delin (1994) administered six questionnaire scales to 241 university students, 86 people with manic-depression, and 38 people with schizophrenia. These scales were: the Australian Sheep-Goat Scale, measuring belief in, and alleged experience of, paranormal phenomena such as ESP and psychokinesis (Thalbourne & Delin, 1993); the Mystical Experience Scale (Thalbourne, 1991); a specially devised Creative Personality Scale (Thalbourne, 2000); the Manic Experience Scale and the Depressive Experience Scale of Thalbourne, Delin and Bassett (1994; see also Thalbourne & Bassett, 1998); and the Magical Ideation Scale (Eckblad & Chapman, 1983).

Interesting results eventuated when these six variables were correlated all with each other, at least for the largest subgroup of participants, the students: it was found that all the correlations were positive and significant. This observation led to the *post hoc* conjecture that factor analysis would yield a single underlying factor. Using principal components analysis, there did indeed emerge a single factor, accounting for 52.8% of the variance. What this factor might be measuring we shall come to in a moment. First we shall look at attempts to replicate it.

Thalbourne and Delin (1995), in a study that lacked the variable mystical experience, found the single factor, provided that depressive experience was omitted. Thalbourne, Bartemucci, Delin, Fox and Nofi (1997) conducted a number of studies that were subsequently pooled into one dataset. They also found replication of the single factor provided that depressive experience was omitted, that factor accounting for 54.2% of the variance. Finally, Thalbourne (1998) also found that depressive experience did not enter into the single-factor solution, which was replicated, accounting for 49.4% of the variance.

Thalbourne et al. (1997) began extending the range of variables included in the single factor that had apparently been uncovered. They noted that schizotypal personality (Claridge & Broks, 1984), fantasy proneness (Myers, 1983), absorption (Tellegen & Atkinson, 1974) and hyperaesthesia (hypersensitivity to sensory stimulation) seemed good candidates for inclusion in the single factor. And indeed, Thalbourne (1998) was able to show that, with the exception of schizotypal personality, all these variables, with the addition of (positive) attitude towards dream interpretation (suggested by the findings of Thalbourne and Delin, 1999), entered into a single-factor solution, accounting for 46.5% of the variance. The correlation matrix of the resultant nine variables is shown in Table 1.

Clearly, we can see, from first principles in statistics, that there is a relationship between paranormal belief, mystical experience, creativity and psychopathology, both of the manic and the schizotypal varieties. We can also see that, for example, paranormal believers tend also to be higher in fantasy proneness (cf., Irwin, 2009, pp. 89-90), absorption (Irwin, 1985), dream interpretation (Thalbourne, 2010), and, perhaps surprisingly, in the purely sensory variable hyperaesthesia (cf., Thalbourne & Delin, 1994, p. 30).

The evidence appears to be relatively good that there does indeed exist a single factor of the type we have noted above, though replication by independent researchers would be useful. In the meantime, however, we can speculate on what the single factor is measuring. What is the common thread underlying these nine variables?

Table 1 Correlations between Nine Variables (N = 234; Thalbourne, 1998)

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Paranormal Belief	_	.56	.37	.28	.54	.60	.45	.32	.33
2. Mystical Experience		_	.32	.24	.41	.49	.41	.25	.19
3. Creative Personality			_	.22	.29	.49	.41	.28	.21
4. Manic Experience				_	.43	.43	.43	.30	.14
<ol><li>Magical Ideation</li></ol>					_	.56	.62	.47	.35
6. Absorption						_	.69	.43	.45
7. Fantasy Proneness							_	.45	.30
8. Hyperaesthesia								—	.29
9. Positive Attitude Towards Dream Interpretation									_

Note: All correlations are significant at .05 level (two-tailed).

### THE SUBLIMINAL CONSCIOUSNESS

Since the time of W. B. Carpenter (1874), F. W. H. Myers (1892), and William James (1982), it has often been thought useful to postulate that there exists, in addition to the conscious part of our minds, another level or region whose contents are *not* immediately present to consciousness, but which under certain conditions can be causally involved in producing conscious states or motor activity. This region has been variously named the *unconscious*, the *preconscious*, even the *precognitive mind*, or, in the case of Myers and James, the *subliminal consciousness*, from the Latin *sub*, meaning *below*, and *limen*, meaning *threshold*. The author acknowledges that the debate over the suitability of any of these terms is vast, but he would like, nevertheless, to appropriate the word *subliminal* to refer to those states that are not currently in consciousness but have the potential to appear there.

Subliminal states thus conceived of are sometimes causally responsible for the more-or-less modified contents of a memory-archive, and sometimes comprise the process that appears to actively constellate and present material to consciousness in an intelligent and sometimes novel fashion. In the case of dreaming, the latter function has sometimes colloquially been called the *Dream Architect*. More generally, the author suggests, following in the footsteps of much prior theorizing, that it might be referred to as the *choregos function*, *choregos* being Greek for the person who conducts a choir, choreographs a dance, or arranges for the production of a theatrical performance such as a drama.

Two terminological implications follow from our adopting the word *subliminal*: first, it implies that those events that *are* in consciousness can

be referred to as *supraliminal*; second, it implies that there is some sort of "threshold" between subliminal and supraliminal—a poorly understood transitional phase or turning point where events with no conscious representation at one time then cause or achieve one at a later time. (That the process may occur in the reverse direction is explored by Houran and Thalbourne, 2003.)

Quite obviously, not everything contained subliminally is presented all at once at the supraliminal level. There does seem to exist some mechanism that is supposed to act as a barrier or filter or as a permeable membrane (to use a neurological metaphor) to prevent (in non-psychotic states) the resurrection of material from being too overwhelming. It seems that we sometimes think of this mechanism as being a kind of dam, or as being like the levee on the bank of a river, holding back the vast waters represented by subliminal contents, or even as being like a life jacket. Joseph Campbell famously said, "The schizophrenic is drowning in the same waters in which the mystic is swimming with delight" (cited in Lee, 1985, p. 40).

The author suggests that there are individual differences between people in the selectiveness with which the barrier or gating mechanism between subliminal and supraliminal is operating (either at the present time or as an enduring trait), with consequent effects upon the extent to which material from the subliminal level appears in—can even engulf—the supraliminal consciousness. Thus, in one person, only certain types or small quantities of psychological material (images, ideation, affect, percepts) are allowed to "cross the threshold" into consciousness whereas, in another, the threshold is, relatively speaking, much more permeable, allowing through into the supraliminal region much more, and perhaps in some sense "deeper" material.

To describe this concept, I (Thalbourne, 1991) suggested the word *transliminality*, from the Latin *trans*, meaning *across*, and *limen*, meaning, as we have seen, *threshold*, to refer to the degree to which the threshold can be crossed (see Figure 1). Persons high in transliminality will, relatively speaking, experience a much larger number of different types of input from subliminal regions, whereas others, lower in transliminality, may hear from that region on considerably fewer occasions; that is, it is postulated that there exist individual differences in the degree to which people exhibit or experience transliminality. Jawer and Micozzi (2009) present an apt

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<sup>&</sup>lt;sup>1</sup> The adjective *transliminal* appears to have been coined by Usher and Burt (1909), and has been occasionally used since by such researchers as Anderson (1960), Rugg (1963) and MacKinnon (1971).

diagram of the process involved, using the terms "conscious" and "unconscious".<sup>2</sup>

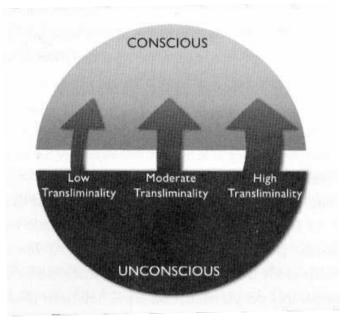


Figure 1. The transliminality concept schematised (arrow thickness represents amount of unconscious material).

Further, the author suggests that the single factor uncovered by the principal components analyses reported earlier in this paper is in fact an estimate of the degree of transliminality. The common thread that appears to unite all the component variables is, the author speculates, that they can be thought of as different situations under which subliminally processed psychological material crosses the threshold from subliminal to supraliminal. The most obvious and perhaps the most basic variable is that of creative personality, and indeed notions of creativity underlie much theorizing here: Creative people exhibit a high degree of transliminality in that their consciousness is characteristically, and from time to time presented with thoughts (novel ideas or solutions to problems; connections between elements) that appear not to be the result of direct reasoning,

<sup>&</sup>lt;sup>2</sup> Image provided by Eric Scafetta Design and Illustration.

though the pieces of the puzzle may have been allowed to lie dormant to incubate; the threshold of such persons does not impede thoughts of an alien origin.

Again, mania, with its flight of ideas, its uprushes of overly optimistic elation, and its often pleasant but unpremeditated delusions, such as delusions of grandeur, could be said to be a result of excessive transliminality allowing subliminal material—especially positive affect but also "creative" ideation—into the conscious, sometimes worked into a story. Drugs such as lithium (and a host of others) might be described most generally as anti-transliminals, and their principal intended action (as well as the goal of psychotherapy) would be to put a lid on the excesses of subliminal activity, reducing the activity of certain processes to a more optimal level.<sup>3</sup>

Following this line of reasoning, paranormal belief (either in the abstract or about one's own experience)4 might be accommodated by supposing it to be a form of associative creativity (Thalbourne, 2004). Believers think there are causal connections between mind and all manner of things in the universe, whereas disbelievers see the operation of mind as far more circumscribed—indeed as confined to the nervous system and its influence—and therefore view such postulated connections as illicit (Mackenzie & Mackenzie, 1980). Nevertheless, there exists some evidence that the believers are occasionally right in their beliefs: parapsychological research has shown that there is a small but significant tendency for believers in psychic phenomena to outscore disbelievers on well-controlled laboratory tests of paranormal performance (e.g., Lawrence, 1993; Thalbourne, 2010). However, it is important to emphasize that in these tests there is a high proportion of incorrect responses given compared with the amount of material correctly presented, just as sometimes many creative solutions must be assayed before coming up with a useful answer.<sup>5</sup> In consciousness as in science, many conjectures are wrong, but not all. It would be useful if the permeable membrane allowed across only correct conjectures, but that is in the realm of fantasy!

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<sup>&</sup>lt;sup>3</sup> We might predict that any agent that reduced the level of transliminality would lower the scores on its constituent variables as well. It is therefore interesting that lithium may reduce, not only mania, but also associational productivity and idiosyncrasy, thought to be important for creativity (Shaw, Mann, Stokes, & Manevitz, 1986). Perhaps lithium reduces belief in the paranormal as well!

<sup>&</sup>lt;sup>4</sup> One can in a very general sense subsume paranormal belief under the rubric of "magical ideation".

<sup>&</sup>lt;sup>5</sup> But this does not undermine the significant difference between believers and disbelievers. It still means that believers are more "creative" than disbelievers.

Likewise with mystical experience, the skeptic supposes that the scenarios and conclusions that are admitted to consciousness in such experience are in the realm of wishful thinking (e.g., Matson, 1965), and it may be that certain primal wishes (such as for a happy ending for all human beings, despite death: see Bucke, 1969, p. 10) are primal and deep-seated in the subliminal consciousness and spring into life. So also, mystical experience usually occurs suddenly (Thalbourne, 1991), irrupting into awareness, with the "out-of-the-blue" characteristic of many transliminal irruptions, presenting itself as a ready-made thought. This thought may be of unity of oneself with God or creation, transcending boundaries; indeed Houran, Thalbourne and Hartmann (2003) and Thalbourne and Maltby (2008) found that transliminality correlated positively and moderately with Hartmann's (1991) Boundary Questionnaire, indicating that the highly transliminal person tends to have "thin", or "crossable" boundaries, indicating a preference for "crossing" them.

It is interesting that from the author's own experience, there is a difference between psychotic and non-psychotic "grand" identifications: the psychotic says "I am Jesus" and means it literally, whereas the non-psychotic, in mystical experience, says "I am Jesus" and means that "I am Jesus in the sense that I recognize my essential *unity* with him, but he, as a personality, is distinct from me". Perhaps one experience is *controlled* transliminality, the other, uncontrolled. Perhaps one is moderate and useful transliminality, the other, excessive and overwhelming. Or might it simply be a difference of insight? The non-psychotic probably has a more developed reality function whereas the psychotic takes fantasy literally.

The other constituents of the single-factor transliminality solution may similarly be amenable to this kind of analysis. If we concede, for example, that perception is mediated by unconscious processes, then it could be said that greater transliminality would see an intensified perception—that is, a hypersensitivity to sensory stimulation. And in fact hyperaesthesia *is* part of the solution. It is of interest, then, that Houran, Hughes, Thalbourne and Delin (2006) found that a high-transliminality group was more sensitive to touch stimuli than was a low-transliminality group. So when, for example, believers in the paranormal report a greater reactivity to perceptual stimuli they may truly be experiencing what they say they do, rather than simply having a more liberal criterion for saying so.

A variable correlated, although at a somewhat low level, with both paranormal belief and with transliminality is dream recall (Thalbourne & Delin, 1999). More strongly correlated with paranormal belief is positive attitude towards dream interpretation (Thalbourne & Delin, 1999). Highly transliminal types of person attach more meaning to at least one inner process, namely, dreaming. It may be that there is an attentional aspect to transliminality: the person's attention is *drawn* by the prominence of the

irruptions from the subliminal mind. This phenomenon may be occurring in the case of the variable that loads strongest on transliminality, namely, absorption, which is the propensity to become totally absorbed in the object of attention—the object (whether mental or physical) tending to become more real than real. Perhaps hunches, intuitions, dreams and half-baked ideas seem more real (and thus more persuasive) to the highly transliminal person by virtue of being more available to the supraliminal consciousness.

Finally, we come to the variable of fantasy proneness, which involves the propensity to engage in fantasy much of the time at a level that may be hallucinatory. Here perhaps we have creatively-crafted imagery coming into awareness in a stream that may resemble perception. It might be likened to a waking dream. Paranormal believers have more such fantasy-proneness-derived imagery, perhaps because they believe in the hypothetical possibilities of consciousness, which include psychic phenomena (see Table 1). Highly transliminal people therefore appear to be able to "ask" for a mental event (like a fantasy) to be played out and have the subliminal respond creatively.

Let us summarize some aspects of our speculations. Let us say that what we have referred to as the choregos function (however that may be conceived in the work of previous theorists) is an aspect of the subliminal consciousness that seeks to connect elements in line with the theme of a story. For example, in mental illness the person often draws upon elements from ancient or modern mythology and weaves them into a narrative (Lukoff & Everest, 1985). Let us speculate that because of the natural and surprising outputs of their subliminal minds, believers in the paranormal have the theme or narrative "I believe wonders occur" and creatively connect elements both psychologically (when they emphasize coincidences and fail to see disconfirming instances) and parapsychologically (making correct answers to guesses) in "sheep-goat" experiments. But it is not recognized as clearly that *dis*believers in wonders do this also, as when they discount every single coincidence, when they fail to support objective parapsychological research, and when they score significantly below chance in a test of paranormal performance. Says Thalbourne (2010) of this:

The present reviewer has suggested that the underlying mechanism [of the effect of paranormal belief] is a need to produce an apparent reality that accords with one's metaphysical paradigm or worldview in relation to the claim that telepathy exists: one does this by paranormally producing information-correspondence in the case of sheep [the believers], and lack of information-correspondence in the case of goats [the disbelievers] . . . (p. 13)

The hallmark of creation is creativity itself.

### TRANSLIMINALITY AND PSYCHOSIS

Thalbourne and Delin (1994) found several indications that highly transliminal people were more likely to report features of psychiatric interest, such as hallucinations (voices and otherwise), and membership of such groups as those with bipolar disorder and with schizophrenia. Likewise, Thalbourne (1998) found that the highly transliminal were more likely to score high on measures of schizotypy and schizotypal personality, hallucination-proneness, dissociation, history of depressive experience, and psychoticism, though admittedly results for neuroticism were mixed (cf., Thalbourne et al., 1997). Most recently, Thalbourne and Maltby (unpublished) found a positive correlation of 0.64 between a measure of transliminality and the Experience of Psychotic Symptoms Scale of Goretzki, Thalbourne and Storm (2009). These results at least *suggest* that transliminality may be a measure of psychosis-proneness. Psychosis would be defined—here as elsewhere—as the overwhelming of the supraliminal consciousness by contents in the subliminal consciousness.

Thalbourne (2010) has suggested, on the basis of remarks made by Phillips, Lukoff and Stone (2009), that psychosis may have negative features, but also that it may have positive ("spiritual") features. These may include veridical creativity, psychic phenomena of a genuine nature, and mystical or religious experience. In the case of psychic phenomena we can test the relationship with transliminality. Thalbourne (2009, p. 383) reports a narrative meta-analysis of 11 relevant analyses, and found 27% to have been significant and in a positive direction. So there is some (albeit weak) evidence that the highly transliminal participant is likely to score higher than the low-transliminal participant in a well-controlled test for the paranormal. As to creativity, that is, notoriously, to be judged by posterity, or at least by the rest of society. The veridicality of mystical and religious experience must be judged by other criteria, such as its universality (James, 1982).

The point to be made is that everyday life is a mixture of the veridical and the falsidical, and madness is simply a case where the apparently falsidical may be more noticeable. The mad may yet have their own wisdom to tell (Lukoff, 1985, 1988). In the light of transliminality—which, it is suggested, is a fundamental mechanism in psychology and parapsychology—it may not be surprising that the ancient Greeks had no word for madness apart from the word for "inspired frenzy".

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c/- AIPR, Inc. P. O. Box 295 Gladesville NSW 2111

Email: lance.storm@adelaide.edu.au