

# PSYCHOLOGICAL MEANINGS OF “POSITIVE SPIRITUAL ENVIRONMENT” AND “PLACES TO COMMUNICATE WITH GOD”

*Laura Fernanda Barrera-Hernandez*

*Victor Corral-Verdugo*

*Cesar Octavio Tapia-Fonllem*

*Blanca Silvia Fraijo-Sing*

University of Sonora, México

---

## Abstract

The spaces that surround and sustain daily life significantly influence people's way of thinking, feeling and behaving. They also reflect personal and meaningful aspects of their lives. This study was aimed at investigating conceptions regarding spiritual environments and characteristics of places wherein individuals communicate with God or a “higher power”, seeking to find empirical support to the idea of positive spiritual environments (spiritual contexts that, simultaneously, promote human wellbeing and environmental conservation). Ninety-one undergraduate students participated in the study. The network of spiritual environment generated a network size of 137 words with a core of 28 words. The highest semantic weights were produced by peace, God, tranquility, love, faith, church, pray, harmony, beliefs, well-being, happiness, and relaxation. Characteristics of the place wherein people communicate with God produced a network size of 104 words and a core of 27 words. The most important of those words were: church, home, calm, room, quiet, school, sacred, natural, alone, street, prayer, and clean. Few words communicating concern for environmentally conservation behaviors were found within the network.

---

**Keywords:** Semantic network, spirituality, spiritual environment, positive environments

---

## Resumen

Los espacios que rodean y sustentan la vida diaria ejercen gran influencia en la manera de pensar, sentir y comportarse, también reflejan aspectos personales y significativos de las personas. El objetivo del presente estudio fue investigar las concepciones de las personas respecto de los

ambientes espirituales y de las características del lugar donde se comunican con Dios o un “poder superior”, buscando encontrar un respaldo empírico a la propuesta de ambientes espirituales positivos (contextos que instigan bienestar humano y cuidado del ambiente). Los participantes fueron 91 estudiantes universitarios. La red de Ambiente espiritual generó un tamaño de red de 137 palabras con un núcleo de 28 palabras. Destacaron por mayor peso semántico: paz, Dios, tranquilidad, amor, fe, iglesia, rezar, armonía, creencias, bienestar, felicidad, relajación. Las características del lugar donde las personas se comunican con Dios generaron un tamaño de red de 104 palabras y un núcleo de 27 palabras. Entre las más relevantes resultaron: iglesia, casa, tranquilo, cuarto, silencioso, escuela, sagrado, natural, solo, calle, oración, limpio. Pocas palabras en la red se relacionaron con la protección del ambiente.

---

## **Introduction**

Knowing the meaning that people give to different constructs allows for delving deeper into their minds, revealing associations between the concepts they handle. The semantic properties of a word are not static; its meaning varies according to theories or ideologies, and also according to the disciplines or areas of knowledge wherein they apply. Moreover, words travel through time, space and cultures; therefore, meanings are a product of the particular history of every word (Pacheco, 2005).

This study was aimed at investigating the psychological meaning people give to words and expressions related to spirituality and positive spiritual environments (PEE). PEE are here conceived as contexts wherein the belief in transcendent entities (i.e., God, higher powers, ideals, etc.) simultaneously instigates wellbeing for people *and* the conservation of the socio-physical environment (Corral-Verdugo, Frías, Gaxiola, Tapia, Fraijo & Corral, 2014). Thus, positive spiritual environments do not only promote the satisfaction of human needs but also drive the practice of pro-environmental and pro-social behaviors. A question that motivates the present study is whether or not “spirituality” and “spiritual environments,” as concepts, contain meanings related to human wellbeing, conservation behaviors and environmental quality.

This paper contains three sections: the first describes the theoretical definitions, characteristics and elements of the “environment,” “spirituality,” “positive environment” and “positive spiritual environment” concepts. The second section details aspects of the semantic networks technique, and describes the methodological components of the present study. Finally, the defining words that make up the semantic networks of “spiritual

environment” and “characteristics of the place where people communicate with God” are presented and analyzed.

### **Environment and spirituality**

Environmental Psychology (EP) is the field of psychology that focuses on the study of environment-behavior interactions (Gifford, 2007). Conceptions and ideas that people generate regarding the environment are part of its subject of study. The “environment” concept has multiple connotations. Canter (1977) defines *place* as a result of relationship between actions, conceptions and physical attributes of the environment, while Páramo (2004) conceives the environment as people’s surroundings that are culturally created and have a meaning. Yassi et al (2002) -from the perspective of the United Nations Environment Program (UNEP) - consider the environment as all that is external to the human being, and anything that can influence the health status of any population. The environment can be physical, chemical, biological, social or cultural. According to the Spanish Royal Academy (2015), the “environment” word has several meanings, including: what surrounds a body, air or atmosphere, conditions or physical, social, economic circumstances of a place or collectivity, attitude of a social group in regard to something or someone. Corral-Verdugo et al. (2014), in turn, considers that the environment consists of a network of relations between animate and inanimate objects, which is present at a specific site over time. From such perspective the environment is not an object (or set of objects) but a property or quality that involves relationships between elements, situations and times.

*Spiritual transcendence*, in turn, refers to an individual’s ability to perceive life from a broader perspective, including a sense of connectivity, universality, and compliance with spiritual practices (Piedmont, 1999). Nervi (2011) notes that the conceptualization of spirituality points to the following terms: meaning, connectivity, transcendence, subjectivity, purpose, universal experience, compassion, inner fulfillment, experiential, integral, multidimensional, ecumenical, existential, hope, individual, inner experience, inner dedication, improving life, unlimited, natural, private, and spontaneous. Moreover, spirituality is addressed as an aspect of the human condition that refers to the way individuals seek and express meaning and purpose, and a connection with time, with oneself, with others, with nature or the environment, and with a dimension that is meaningful or sacred (Puchalski et al., 2011). A number of studies indicate a positive relation between spirituality, human wellbeing and environmental conservation (McClain-Jacobson et al, 2004; Pargament, 2009; Vaillant, 2008). Those studies provide evidence supporting the pertinence of a “positive spiritual environment” construct (Corral-Verdugo et al, 2014). Yet, it is necessary to

investigate whether people incorporates these relations into their meaning of “spiritual environment.”

### **Positive environments and positive spiritual environments**

The theoretical proposal by Corral-Verdugo et al. (2014) conceives *positive environments* (PE) as settings, contexts or sets of stimulating conditions that **a)** allow the satisfaction of human needs *and b)* instigate the conservation of the socio-physical environment. Therefore, in a positive environment, people is benefitted by the environment and, reciprocally, the environment is protected by people. These authors mention diverse settings wherein environmental positivity can be explored, including family, school, work, institutions, nature, the city, legal contexts, and spiritual environments, among others.

In turn, *positive spiritual environments* include places, situations, institutions or programs that facilitate the connection between individuals and a transcendental entity (God or gods, higher powers), nature, groups of people, ideas, etc. The defining feature of those contexts is that the individual, by putting his/her trust in this transcendental entity, gets to feel good, obtains guides to grow as a person and solve difficult situations, finds reasons for communion with her/his fellows and gets motivated to protect the natural and social environments. In addition s(he) occasionally develops feelings of integration into the universe, increasing her/his awareness and perception of the surrounding reality (Corral-Verdugo et al., 2014).

Therefore, the model of positive spiritual environments consists of the relationships between the material and intangible aspects that shape a positive spiritual environment (i.e., transcendental ideals and enabling material elements facilitating spirituality), personal well-being (physical and psychological well-being, happiness), sustainable behaviors (pro-social and pro-ecological practices included), and environmental-quality factors (which contain physical and social conservation indicators).

### **The natural semantic network technique**

A meaning can either be denotative or connotative. A meaning is denotative when it is formally and generally assigned. It is connotative when developed with reference to an object, in a subjective, particular, and contextual way -as psychological meaning- and when it plays a mediating role between objects and behaviors (Moreno, 1999). The present study is interested in connotative meanings.

One of the most important approaches to the study of meanings is based on the idea that the meaning of a word is given by how it is embedded within a network of other meanings. One of the first theories regarding how meaning is understood derives from word association. According to

behaviorists, meaning is just the sum of all associations to a word. Yet, it is nowadays acknowledged that the association itself is insufficient to capture all aspects of meaning, because in an associative network it is difficult to find structure, hierarchy or relationships between words. Alternatively, a semantic network does possess those features; it establishes connections between words that have semantic value; that is to say: in a semantic network the relations between concepts have meaning (Harley, 2008).

Srihari, Rapaport and Kumar (1987) define semantic network as a method of knowledge representation. This method includes procedures for the representation of information in order to retrieve knowledge and make inferences from it.

Otherwise, the natural semantic network is the set of notions that are chosen using memory through a reconstructive process that allows the subjective evaluation of events, actions or objects that result in psychological meaning. This technique is based on the idea of an internal organization of information in long-term memory, operating in a network wherein words form relationships, and together provide meaning. Therefore, meaning is the result of a reconstructive process of information that provides knowledge regarding a concept. The bigger the size of the semantic network, the better the understanding and knowledge regarding the meaning of the defined idea (Reyes, 1993). Suarez de Figueroa and Gomez (2008) also indicate that semantic networks or conceptual networks constitute a technique that uses the presentation of knowledge based on relationships. Vera, Pimentel and Batista (2005) recommend the utilization of this technique when the meaning that a community possesses regarding an object is unknown or in doubt, whether by its heterogeneity, the search for generalization, or because previous observations have shown that it is a controversial concept.

A natural semantic network starts with a central concept or node that generates a list of defining words, where the total number of words produced by participants reflects the network size (NS). A value or semantic weight (SW) is assigned to each word, in accordance to its relevance as defining the concept. The semantic distance (SD) refers to the space separating the studied elements; this distance shows that not all the given defining concepts (or *definers*) are equally important in defining the central concept or node. This importance could be found within the rank obtained by each definer: the definers with semantic weights higher than their breaking point (or where they become asymptotic) form the core network (CN) (Reyes, 1993).

Milfont (2010) believes that, in spite of being a well-known technique in the Spanish and Portuguese context, the natural semantic network is unknown in other areas of the world. So they consider that reporting results from use of this technique to English-speaking readers is important.

## Method

### *Participants*

Ninety-one undergraduate students participated in this study; 24 were males and 67 females, aged from 19 to 54 years (mean = 21.4 years). In regard to religion, 72 were Catholics, 10 Protestants, 3 Atheist, 3 did not adhere to any religion, 1 was Buddhist, 1 was agnostic and 1 was identified as Mormon.

### *Instrument*

The technique of natural semantic networks was used for data collection. The presented stimuli phrases were "Spiritual environment" and "Characteristics of the place where I communicate with God," providing a format for writing five descriptive words. Space in the response sheet was included to rank the importance of the descriptive word using response options from "1" (most important) to "5" (less important).

### *Procedure and data analysis*

The instrument administration took place at university classrooms. The semantic network was analyzed in Microsoft Excel 2010, wherein the network size, the semantic weight, the core network and the quantitative semantic distance were calculated.

## Results

The participation of the students group created a network size (NS) of 137 defining words for "spiritual environment" and, when the sum of the frequency ranking for the semantic weight was computed, 28 words resulted included in the core network. The definer 29 and further were not included because they represented the turning point wherein the semantic weight becomes asymptotic. The words with highest semantic weights were: peace, God, tranquility, love, faith, church, pray, harmony, beliefs, well-being, happiness, and relaxation.

Table 1 Weight and semantic distance of the set of "spiritual environment" definers.

<b>Definer</b>	<b>Semantic Weight</b>	<b>% Semantic Distance</b>
Peace	393	0
God	337	14
Tranquility	234	40
Love	206	48
Faith	200	49
Church	159	60
Pray	113	71
Harmony	109	72
Beliefs	95	76
Happiness	77	80
Relaxation	77	80

Hope	58	85
Religion	47	88
Meditation	40	90
Serenity	30	92
Meeting	29	93
Retired	27	93
Energy	25	94
Mass	25	94
Principles	25	94
Community	23	94
Union	23	94
Sacrifice	22	94
Joy	21	95

For the “Characteristics of the place where I communicate with God” stimulus, a network size (NS) of 104 words was generated, which included a network core of 27 words. The ones with the highest semantic weights were: church, home, tranquility, room, quiet, school, sacred, natural, alone, street, prayer, clean, mind, family, anywhere, work, nice, retired, thinking, travel, God image, bed, praying, illuminated, respectful, group, intimate.

Table 2 Weight and semantic distance of the set of defining characteristics for the “Space where I communicate with God” stimulus.

<b>Defining</b>	<b>Semantic weight</b>	<b>%Semantic Distance</b>
Church	547	0
House	404	26
Tranquility	288	47
Room	133	76
Quiet	114	79
School	96	82
Sacred	91	83
Natural	85	84
Alone	78	86
Street	77	86
Prayer	76	86
Clean	62	89
Mind	59	89
Family	54	90
Anywhere	51	91
Work	51	91
Nice	45	92
Retired	41	93

Thinking	38	93
Travel	34	94
God image	32	94
Bed	29	95
Pray	28	95
Illuminated	27	95
Respectful	27	95
Group	26	95
Intimate	25	95

Table 3 List, weight and semantic distance set of defining spiritual environment.

Defining	Semantic	Semantic Distance	Defining	Semantic	Semantic
Peace	393	0	Inner life	9	98
God	337	14	Affectivity	8	98
Tranquility	234	40	Gratitude	8	98
Love	206	48	Praise	8	98
Faith	200	49	Warm	8	98
Church	159	60	Democracy	8	98
Pray	113	71	Entrust	8	98
Harmony	109	72	Emotional stability	8	98
Beliefs	95	76	People	8	98
Well-being	87	78	Humanity	8	98
Happiness	77	80	Thoughts	8	98
Relaxation	77	80	Personality	8	98
Hope	58	85	Preaching	8	98
Religion	47	88	Fulfillment	8	98
Fellowship	43	89	Simplicity	8	98
Meditation	40	90	Time	8	98
Serenity	30	92	Transcendence	8	98
Meeting	29	93	Vigils	8	98
Retired	27	93	Truth	8	98
Awareness	26	93	Worship	7	98
Energy	25	94	Nice	7	98
Mass	25	94	Air	7	98
Principles	25	94	Altar	7	98
Community	23	94	Altruism	7	98
Union	23	94	Learning	7	98
Sacrifice	22	94	Connection	7	98
Joy	21	95	Cosmos	7	98
Soul	19	95	Development	7	98
Inside	18	95	Evangelism	7	98



Holy Spirit	17	96	Expansion	7	98
Go Church	17	96	Family	7	98
Communication	16	96	Faithful	7	98
Family	16	96	Commandments	7	98
Service	16	96	Miracle	7	98
Coexistence	15	96	Obedience	7	98
Balance	15	96	Purity	7	98
Joy	15	96	Relaxation	7	98
Forgiveness	15	96	Reflection	7	98
Positivity	15	96	Security	7	98
Stillness	15	96	Dreams	7	98
Reflection	15	96	Jehovah's	7	98
Bless you	15	96	witnesses		
Wisdom	14	96	Acceptance	6	98
Holiness	14	96	Friends	6	98
Understanding	13	97	White	6	98
Reading	13	97	Conformity	6	98
Sanctuary	13	97	Knowledge	6	98
Concentration	12	97	Cult	6	98
People	12	97	Empathy	6	98
Rules	12	97	Teaching	6	98
Good deeds	10	97	Environment	6	98
Tranquility	10	97	Effort	6	98
Mormons	10	97	Spiritual	6	98
Word of God	10	97	Fans	6	98
Environment	9	98	Ghosts	6	98
Self-concept	9	98	As should do	6	98
Fasting	9	98	Sea	6	98
Coherence	9	98	Mind	6	98
Comfort	9	98	You don't see it,	6	98
Rights	9	98	you feel it		
Such	9	98	Patience	6	98
Experience	9	98	Father	6	98
Courtesy	9	98	Prayer	6	98
Humility	9	98	Power	6	98
Equality	9	98			
Jesus	9	98			
Nature	9	98			
Person	9	98			

---

Table 4 Weight and semantic distance set of defining characteristics of the place of communication with a Supreme Being.

<b>Defining</b>	<b>Semantic</b>	<b>Semantic</b>	<b>Defining</b>	<b>Semantic</b>	<b>Semantic</b>
Church	547	0	Open air	9	98
Home	404	26	To lie down	9	98
Tranquility	288	47	Soul	9	98
Room	133	76	Belief	9	98
Quiet	114	79	Stability	9	98
School	96	82	Simple	9	98
Sacred	91	83	Tense	9	98
Natural	85	84	Actions	8	99
Alone	78	86	Acoustic	8	99
Street	77	86	Silent	8	99
Prayer	76	86	Walking	8	99
Clean	62	89	Trust	8	99
Mind	59	89	Faith	8	99
Family	54	90	Meditation	8	99
Anywhere	51	91	Pantheon	8	99
Work	51	91	Small	8	99
Nice	45	92	Reflection	8	99
Retired	41	93	Relaxation	8	99
Thought	38	93	Always	8	99
Travel	34	94	Neighbors	8	99
God image	32	94	Community	7	99
Bed	29	95	With positive load	7	99
Pray	28	95	Awareness	7	99
Illuminated	27	95	Confidential	7	99
Respectful	27	95	Stay	7	99
Group	26	95	Strait	7	99
Intimate	25	95	Honesty	7	99
Chapel	24	96	Holy hour	7	99
Company	23	96	Reading the Bible	7	99
Tough times	23	96	Tomorrow	7	99
Car	22	96	Host	7	99
Harmonious	19	97	Religious people	7	99
Mass	19	97	Meetings	7	99
Pretty	18	97	Rosary	7	99
Warm	18	97	Parish Hall	7	99
Love	17	97	Healthy	7	99

Sanctuary	17	97	Safe	7	99
Night	16	97	Chairs	7	99
Pacific	16	97	Society	7	99
Friends	15	97	Catechism	6	99
Confession	15	97	Congress	6	99
Big	15	97	Human construction	6	99
Hospital	15	97	Space	6	99
Truck	14	97	Inspirational	6	99
Pure	14	97	Observation	6	99
Altar	10	98	Scented	6	99
Bible	10	98	With other people	6	99
Communion	10	98	Room	6	99
With myself	10	98	Seminar	6	99
In a sentence	10	98	Solidarity	6	99
Introjection	10	98	Dreams	6	99

## Conclusion

Based on the previously presented results, a preliminary conclusion can be posited: that a deal of congruence exists between some of the constructs outlined in the model of positive environments and the words associated with the “spiritual environment” stimulus. Such words included ideals (beliefs, belief in God or a Supreme Being), personal benefits (well-being, happiness, relaxation), and enabling elements of the spiritual environment (tranquility, peace, harmony, clean, natural). It was also noticed that, in response to the stimulus presented as “Characteristics of the place where I communicate with God” (a proxy for “spiritual places”), people referred, in the one hand, to physical characteristics that enabled spiritual experiences; those included: calm, quiet, sacred, natural, alone, clean, pleasant, retired, illuminated, respectable, and intimate. On the other hand, respondents referred to settings where (or times when) they communicate with their transcendental entities, such as: church, home, room, school, street, prayer, mind, family, anywhere, work, thought, travel, bed, and praying group.

Yet, a missing element of the positive environment model was noticed within the core of the two analyzed stimuli: The environmentally-protective behavior that is necessary to sustain the positivity of a setting (the spiritual one included). With the exception of a few words such as “clean” and “natural”, participants’ responses did not include neither pro-environmental actions nor environmental quality descriptions as ideas defining their spiritual environments. It is possible that they had not incorporated the notion of environmental conservation as integral to the whole idea of spirituality, as some current religious prescriptions state.

Therefore, our findings highlight the emphasis that most individuals still place on the personal benefits derived by their spirituality, which contrast with less interest or concern for protecting the environment.

### **Acknowledgements:**

This paper was published with the support of Programa de Fortalecimiento de la Calidad en Instituciones Educativas. OP / PROFOCIE -2014-26MSU0015Z-10.

### **References:**

- Canter, D. (1977). *The psychology of place*. London: Architectural Press.
- Corral, V. & Pinheiro, J. (2004). Aproximaciones al estudio de la conducta sustentable [Approaches to the study of sustainable behavior]. *Medio Ambiente y Comportamiento Humano*, 5, 1-26.
- Corral-Verdugo, V., Frías, M., Gaxiola, J., Fraijo, B., Tapia, C., & Corral, N. (2014). *Ambientes positivos* [Positive environments]. Mexico City: Pearson
- Gifford, R. (2007). *Environmental Psychology. Principles and practice*. Colville, WA: Optimal Books.
- Harley, T. A. (2008). *The Psychology of Language: From Data to Theory*. New York: Psychology press.
- McClain-Jacobson, C., Rosenfeld, B., Kosinski, A., Pessin, H., Cimino, J., & Breitbart, W. (2004). Belief in an after-life, spiritual well-being, and end-of-life despair in patients with advanced cancer. *General Hospital Psychiatry*, 26, 484-486.
- Milfont, T. (2010). The psychological meaning of preservation and utilization attitudes: A study using the natural semantic network technique. *Psychology*, 1, 57-70.
- Moreno, A. (1999). El significado psicológico de conceptos relativos a la educación ambiental [The psychological meaning of concepts related to environmental education]. *Revista interamericana de educación de adultos* 1, 92-109.
- Nervi, M. A. (2011). Espiritualidad, religiosidad y bienestar. Una aproximación empírica a las diferencias entre espiritualidad y religiosidad y su relación con otras variables. Reduciendo la controversia. [Spirituality, religiosity and well-being. An empirical approach to the differences between spirituality and religiosity, and their relationship with other variables. Reducing controversy]. *Revista Psicología.com*. Retrieved from: <http://www.psiquiatria.com/revistas/index.php/psicologiacom/article/viewFile/1302/1196>
- Pacheco, M. (2005). El ambiente, más allá de la naturaleza. [The environment beyond nature]. *Revista elementos: Ciencia y cultura*, 12, 57, 29-33.

- Páramo, P. (2004). Algunos conceptos para una perspectiva optimista de vivir la ciudad. [Some concepts to an optimistic perspective of living the city]. *Territorios: Revista De Estudios Regionales y Urbanos*, (10/11), 91-109.
- Pargament, P. (2009). Spirituality. In S. J. Lopez (ed.), *The Encyclopaedia of Positive Psychology*. Chichester, UK: Wiley-Blackwell.
- Piedmont, R. L. (1999). Does Spirituality Represent the Sixth Factor of Personality? Spiritual Transcendence and the Five-Factor Model. *Journal of Personality* 67 (6), 985- 1013.
- Puchalski, C., Ferrell, B., Virani, R., Otis-Green, S., Baird, P., Bull, J., Chochinov, H., Handzo, G., Nelson-Becker, H., Prince-Paul, M., Pugliese, K., Sulmasy, D. (2011). La mejora de la calidad de los cuidados espirituales como una dimensión de los cuidados paliativos: el informe de la Conferencia de Consenso. [Improving the quality of spiritual care as a dimension of palliative care: report of the Consensus Conference]. *Medicina Paliativa*, 18 (1), 20-40.
- Reyes, L. I. (1993). Las redes semánticas naturales, su conceptualización y su utilización en la construcción de instrumentos [Natural semantic networks, its conceptualization and its use in the construction of instruments]. *Revista de psicología social y personalidad IX* (1), 81-97.
- Royal Spanish Academy (Real Academia Española). (2015). *Ambiente*. [Environment]. Retrieved from: <http://lema.rae.es/drae/srv/search?id=JayW2mOnzDXX2j5n6qhm>
- Srihari, S. N., Rapaport, W. J., & Kumar, D. (1987). *On knowledge representation using semantic networks and Sanskrit*. Retrieved from: <http://www.cse.buffalo.edu/~rapaport/Papers/sriharietal87.pdf>.
- Suarez de Figueroa, M., & Gómez, A. (2008). Redes semánticas y marcos [Semantic networks and frames]. pp. 131-170. In Palma, J. & Marín, R. (Eds), *Inteligencia Artificial: técnicas, métodos y aplicaciones*. Spain: McGraw Hill.
- Vaillant, G. E. (2008). Positive emotions, spirituality, and the practice of psychiatry. In A. R. Singh & S. A. Singh (eds.), *Medicine, Mental Health, Science, Religion, and Wellbeing*”. *Mens Sana Monographs*, 6, 48-62.
- Vera, J., Pimentel, C., Batista, F. (2005). Redes semánticas: Aspectos teóricos, técnicos, metodológicos y analíticos [Semantic networks: theoretical, technical, methodological and analytical aspects]. *Ra Ximhai* (1) 003 439-451.
- Yassi, A., Kjellström, T., de Kok, T., & Guidotti, T. (2002). Salud ambiental básica. [Basic environmental health]. Mexico City: *Programa de las Naciones Unidas para el Medio Ambiente*.