

# What is Neurotheology? (Part 1)

The multidisciplinary field of scholarship that seeks to understand the relationship between the human brain and religion.

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<https://www.youtube.com/watch?v=7SJCDLHyeqk>  
<https://www.youtube.com/watch?v=w8gTH3SGqqU>

<https://www.youtube.com/watch?v=uxREBIWvxfk>  
<https://www.youtube.com/watch?v=6IAzPWS1Yhc>

## Brain functions that might relate to religious and spiritual concepts (broadly speaking)

**Holistic processing** - Takes our sensory information and helps us to construct a sense of our self and how that self relates spatially to the rest of the world. The cognitive ability to perceive discrete components as together making up a qualitative “whole” (e.g. face recognition). Parietal lobe.

**Reductionist processing** – the cognitive ability to apply constructs to specific objects or situations.

**Causal** – the analytical process of identifying causal relationships.

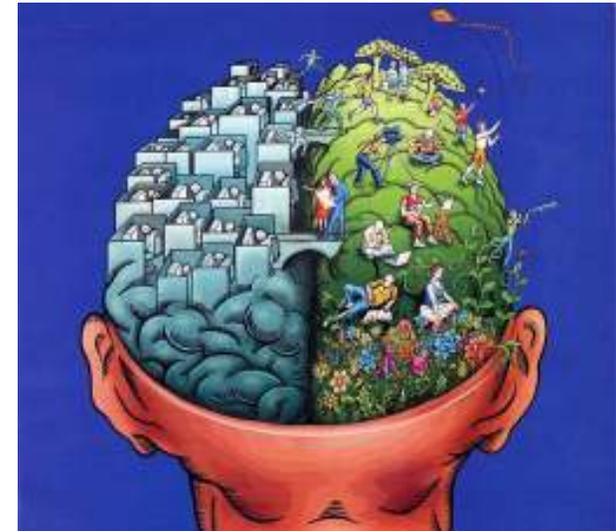
**Abstractive** – the ability to think about objects, principles, and ideas that are not physically present.

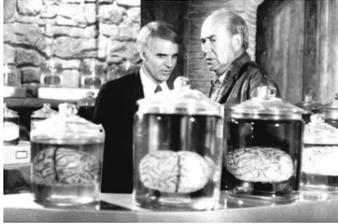
**Binary** - The brain has a propensity for setting up opposites as a way of understanding the world around us. The binary process helps us to distinguish good from bad or right from wrong.

**Willfulness** – Ability to act with purpose and planning. Frontal lobes

**Emotional value** - our capacity for resilience, motivation, empathy, reasoning, stress management, communication, and our ability to read and navigate a plethora of social situations and conflicts. Limbic system.

**Existential** - the sense of being separate and distinct from others and the awareness of the constancy of the self. The process which helps us to identify things which do and do not exist.





## Brain Functions

**Holistic processing** - the cognitive ability to perceive discreet components as together making up a qualitative “whole” (e.g. face recognition). Parietal lobes.

A. If we use a holistic function to **comprehend** God, we might think about the basic Jewish monotheistic concept of God's

1. wholeness and
2. oneness.

B. The holistic function might be applied both **conceptually** as well as **experientially**.

1. **Conceptually**, we might understand the oneness of God as expressed in the *Sh'ma*.
2. **Experientially**, an individual might experience a sense of oneness *with* God.

C. We rely on the holistic function of the brain to bridge the enormous gap between God and human beings. Through the Torah, or the sacred texts of other religions, a guide or formula is provided for such a relationship. The **binary** process is bridged so that human beings can find a relationship with God.





## Brain Functions



**Reductionist processing** – the cognitive ability to apply constructs to specific objects or situations.

If one were to apply the reductionist function to the notion of God, one might have a sense of how God is *in* all things or affects all things.



**Causal** – the analytical process of identifying causal relationships.

God might be perceived as the root cause of the universe, and hence, the cause of all things.

Interesting theological debate might focus on:

A. Whether God continues to cause all things to happen or

B. Whether God initiated the universe through creation, but then simply watches the universe unwind—not causing any future events to occur.





## Brain Functions



**Abstractive** – the ability to think about objects, principles, and ideas that are not physically present.

1. Talmud is basically utilizing all forms of the abstract to help better understand the religious ideas that exist within the Torah.

- a. Thought - Intention, 'Kavana'
- b. Language – Words used in prayers, or texts.
- c. Symbolism - Tefillin, Tzitzit, Shofar, Lulav.



ומלך עלינו אתה ה' לבדך בְּחֶסֶד וּבְרַחֲמִים. וְצַדִּיקוֹ  
בְּמִשְׁפָּט. בְּרוּךְ אַתָּה ה', מֶלֶךְ אוֹהֵב צְדָקָה וּמִשְׁפָּט

2. Different directions Jewish theology can go based on these abstract processes.

- a. God expressed as an idea or conceived of from logical argument.
- b. Understanding the moral concepts arising from God's covenant described in the Torah are all reflections of different abstract processes. What are Tzedaka and Mishpat?

בראשית פרק י"ח-י"ט	בראשית פרק י"ח-י"ט
וַיֹּדֶד אִשְׁרָיִם הַמִּצְפָּה אֵין מַאֲבָרָהִם	וַיֹּדֶד אִשְׁרָיִם הַמִּצְפָּה אֵין מַאֲבָרָהִם
אִשְׁרָיִם אֵין עֵשָׂה וּמְבָרָהִם הִי יִרְיָה	אִשְׁרָיִם אֵין עֵשָׂה וּמְבָרָהִם הִי יִרְיָה
לִי גִדְלוּ וְעֹשֶׂם מְבָרָכִים בּוֹ כֹּל נְדִי	לִי גִדְלוּ וְעֹשֶׂם מְבָרָכִים בּוֹ כֹּל נְדִי
הַמֶּלֶךְ: כִּי יִדְעִמְנוּ לְמַעַן אִשְׁרָיִם יִשָּׂא	הַמֶּלֶךְ: כִּי יִדְעִמְנוּ לְמַעַן אִשְׁרָיִם יִשָּׂא
אֵת בְּנֵי וְאֵת בָּתֵּן אַחֲרָיו אֲשֶׁר־	אֵת בְּנֵי וְאֵת בָּתֵּן אַחֲרָיו אֲשֶׁר־
דֶּרֶךְ-יְיָוִדוּ שְׂמֹחִים צְדָקָה וּשְׁשֻׁפֵּט	דֶּרֶךְ-יְיָוִדוּ שְׂמֹחִים צְדָקָה וּשְׁשֻׁפֵּט
לְמַעַן תִּבְרָא יְיָוִדוּ עַל אַבְרָהָם אֵת	לְמַעַן תִּבְרָא יְיָוִדוּ עַל אַבְרָהָם אֵת
אֲשֶׁר דִּבֶּר-עֲלָיו:	אֲשֶׁר דִּבֶּר-עֲלָיו:

# צדקה ומשפט

3. How language is used in the written Torah to create meaning and provide a guide for living.



## Brain Functions

**Binary** - The brain has a propensity for setting up opposites as a way of understanding the world around us.

1. Human beings and God.
  - a. In religion, one of the most fundamental opposites is the difference between human beings and God.
  - b. How can human beings who are finite, mortal, and limited have any ability to form a relationship with an infinite, omniscient, and all-powerful being? Of course, the nature of that relationship lies at the heart of all religions.
  - c. We rely on the **holistic** function of the brain to bridge the enormous gap between God and human beings.
2. The **binary** process helps us to distinguish good from bad or right from wrong.



**Willfulness** – Ability to act with purpose and planning. Frontal lobe

There is a strong sense of the willfulness of God and also the willfulness of a person. The notion of free will is an important element of Jewish tradition, and this is based heavily on our brain's ability to perceive that sense of willfulness.



**Emotional values** - our capacity for resilience, motivation, empathy, reasoning, stress management, communication, and our ability to read and navigate a plethora of social situations and conflicts. Limbic system.

The Judaic emotional values are all related to our brains' emotional processing areas.

1. Loving God
2. Forgive
3. Be Compassionate
4. Have Empathy
5. Perform Charity.



On a practical level, we see the influence of both positive and negative emotions related to religions.

- a. Religions can foster great love and cohesion among congregants.
- b. Religions can also espouse fear and anger at those who do not adhere to the same religious beliefs.

**Existential** - the sense of being separate and distinct from others and the awareness of the constancy of the self. Process which helps us to identify things which do and do not exist.

1. Cognitive neuroscience has not identified the areas of the brain that help us to perceive what is real and what is not.
2. The existential process is critical in the larger dialogue regarding God.
3. How is it that one brain is convinced that God exists while another brain, looking at the same world, is convinced that God does not exist?
4. Consider future studies of the brain to determine whether or not we find specific differences between the religious and nonreligious individuals.

Current research has not explored the question of **existence** so much as it has attempted to **differentiate how** religion and religious beliefs affect the brain, both in the short and long term.