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David

# Energetic Roots

## *The Thermodynamics of ase*

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**M**any of us who have taken Chemistry courses are familiar with the three laws that are the foundations of Thermodynamics, the transferal and transformation of energy. Energy is constant, neither created nor destroyed, only transferred and transformed. As energy is transformed, the state of total energy becomes increasingly disordered. This disorder is known as entropy.

Science's definition of energy mirrors the concept of "ase" (ae shé) from the Yoruba people of West Africa. Like many concepts in Yoruba tradition and culture, ase is simple but possesses an impossible depth. This powerful and practical term has received many translations. "Power," "authority," and "so be it" are amongst the most popular. The simplest translation of ase, however, is "energy." Power is quite literally the rate of energy

transfer. Authority is simply a manifestation of power, a state of being able to utilize energy. "So be it" is a somewhat inaccurate translation that parallels the Abrahamic "amen," also often translated as "so be it" in the Christian traditions. Broken down, ase can be taken as "A se:" "We do (it)."

The difference between the "so be it" and "we do (it)" is more profound than it may initially seem. Christianity, the most prolific advocate of amen, is a religion based on recognizing and respecting an external authority. Yoruba tradition, on the other hand, is based on the recognition of both external and internal authority and recognizing their unity. Thus, when a Christian says 'amen,' they are pleading for God to use His authority in their favor. When a Yoruba says 'ase', they are investing their own God-given authority and energy. 'Ase' in this context indicates a much

more personal and active investment than a standard 'amen.' It indicates a willingness to do whatever is required of you to bring about what you have agreed on. As such, saying 'ase' is the signing of a spiritual contract, and it is used with far more caution than 'amen'.

The spiritual investment of 'Ase' must be utilized wisely due to the Yoruba manifestation of the First Law of Thermodynamics. The First Law says that energy cannot be created or destroyed and, therefore, the total energy is constant. For the Yoruba, this first law is found in Olodumare, the Almighty God of the Yoruba worldview. Olodumare, known by a wide variety of names and titles such as Olorun and Oluwa, is often compared to the Christian God. However, while Olodumare fulfills many similar roles as the original and final authority, he has this authority because he is the source of ase. Thus, Olodumare serves as the embodiment of total ase, or energy. As the embodiment of everything, Olodumare's authority originates from his agency over himself; nothing can happen to or within his body without his consent, much like how the Devil cannot attack Job without God's permission in the Biblical Book of Job.

This manifestation of thermodynamics also appears in the traditional Yoruba view of positive and negative experiences. While a negative experience can be interpreted as some form of divine punishment, it is, at its core, viewed in a manner akin to an exothermic (heat-releasing and destructive) reaction, breaking things down and transforming knowledge into wisdom. Positive experiences are akin to an endothermic (heat-absorbing and constructive) reaction, building something up at the expense

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of energy (i.e. physical and/or spiritual resources). Much like in thermodynamics, endothermic "reactions" must be paired with and fueled by the exothermic, resulting in the Yoruba concept of ebo, sacrifice and offering. The offering of ebo serves as a method of refilling internal and external energetic reserves, essentially an act of spiritual eating or filling a car with gas.

Much like when gas is burned to fuel a car, ase changes forms when it is utilized. The Second Law of Thermodynamics states that as temperature increases, the distribution of energy becomes more disordered, an increase in entropy. Like the gas' energy that transforms into an explosive force when it meets a spark, ase scatters when it is utilized. Once used, ase is available for other work. This renewed potential is referred to in Yoruba tradition as a "multiplication." Multiplication is not the creation of new ase, but a redistribution as ase is bestowed and nurtured, much like plant reproduction. As time moves on, one tree becomes a forest and the root system becomes increasingly complex and chaotic. Thus, entropy increases as the manifestations of ase expands and diversifies.

An excellent example of the entropic nature of ase from Yoruba tradition is the counting of "201 or 401" orisa, or Yoruba deities/deified ancestors. Here the "1" is the most important symbol, as it indicates that there is always one more orisa. In other words, the courts of Heaven grow more chaotic as they grow more crowded.

Much like when gas is burned, the utilization of ase is accompanied by heat. Physical and spiritual heat for many traditional African spiritualists tend to go together. Work releases heat as a by-product, both in the spiritual and the physical. Spirits orientated towards action are perceived as hotter. Spirits can vary in temperature from moment-to-moment and incarnation-to-incarnation.

An example of the relative nature of spiritual heat is the duality of Ogun: Ogun, the fire, who uses the blades he forges to carve new paths and facilitate the forward movement of civilization down these path; and Ogun, the hunter, who must patiently wait for his prey to be vulnerable. Like physical heat, spiritual heat requires a standard to compare to and provide contrast.

The Third Law of Thermodynamics gives a hypothetical standard to which all measures of entropy are compared: a perfect crystalline substance at absolute zero has zero entropy. The Yoruba equivalent of this perfect crystalline substance would be the most prominent head of the Yoruba pantheon: Obatala, the King of the White Cloth. Many versions of Obatala that exist around the globe are said to have never been human, a rarity within Yoruba tradition as the human experience is often considered the fastest (and most challenging) route for completing one's spiritual journey. Because of the human experience's efficiency, many orisa have undergone countless human incarnations.

Obatala's alleged lack of human experience would make them purely spiritual, or hypothetical, also denoting his role as the personification of the Spiritual Realm. Obatala's role as a standard originates from both his imagery as the Great Carver and the pinnacle of iwa pele, or balanced character. As the Great Carver, Obatala molds all life in the womb and serves as the standard for all that he carves (i.e. all that holds ase). Iwa pele, or balanced character, can be summarized as the ideal of walking your own path without disrupting anyone else's and wasting as little ase as possible. This principle serves as the backbone of many Yoruba customs, particularly between elders and youths, and facilitates the ease with which ase diffuses. The ease of this diffusion results in the quality of itutu, or coolness. Thus, as the perfection of iwa pele, Obatala exists in the coolest state: absolute zero.

Throughout all its states, energy follows the same rules. These rules have been summarized, not only by modern science, but also by the spiritual traditions of the Yoruba and indigenous peoples all around the world. Across human history and the myriad of cultural backgrounds and experiences, humans have made many of the same observations. Among these observations is that energy cannot be created nor destroyed, only transferred and transformed. The transfer and transformation of energy creates chaos, thus heat and work walk hand-in-hand. Even if it does not physically exist, there exists an object or being in a perfectly ordered state, free of chaos. Just like energy, knowledge cannot be created or destroyed, only transformed and transferred. ● ● ●