Asymmetric Electric Systems: Basic Principle

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Preface

A completely novel class of electric systems is introduced in this essay. We do not use the popular/conventional Maxwell's point of view in the description of electric systems, but a modified form of quantum electrodynamics (QED). When QED is applied to handle a simple electric circuit, several fundamental questions arise:

1. Which role do the broken symmetries play in electric systems?
2. What has the quantum-vacuum to do with electricity?
3. How does an electric field emerge and how does it proceed through space?
4. How is a force assigned?
5. What is the input energy used for?
6. Where does the energy from the output come from?
7. Why are the observable energies conserved?
8. What is energy?

These questions are answered in the animation film "Symmetric electric systems and the energetic exchange with the quantum-vacuum". Because this essay starts where the film ends, the author recommends watching the film first. The link to the film is on the website www.vakuumenergie.de.

Introduction

Asymmetric electric systems are a new class of electric systems. In relation to their energetic exchange with the quantum-vacuum, these systems are energy asymmetric. Energy asymmetry means that more observable energy is generated at the output as was input before in an observable form.

When more observable energy is derived from the output than was induced at the input before, then energy must flow into the system from an additional energy source. Fortunately, the system operator has the prerogative to determine which energy form will be used as additional energy. This additional energy can for example exist in the form of a potential flow. However, a potential flow must not necessarily be generated by the induction of an observable energy. An electron for example permanently generates a potential flow without an observable energy input. The energy for the generation of the electric potential flow originates from the quantum-vacuum.

An asymmetric electric system receives its additional energy from the quantum-vacuum and must therefore be regarded as an energetically open system. The additional energy flowing into the system therefore originates from an emission-free, free of charge and consistent external source. This energy can basically be used in two different ways. One can either use this energy to maintain the dipole at the input or to generate more observable energy directly at the load.

One theoretical method, with which the goal of an asymmetric electric system can be achieved, is presented in the following essay. An experiment, which successfully implements the feasibility/viability of this method, is described in a schematic way.

Energy conservation from the QED point of view

The energy conservation principle explains the conservation of observable energy under the precondition that every source charge behaves like an energetically closed system. However, when QED is used to describe an electric system, the source charges are regarded as open energetic systems that interact with their environment, the quantum-vacuum. That means that the observable energy does not derive directly from a mass itself, but from the quantum-vacuum. An electric field exists for example in "empty" space as a polarisation of locally appearing virtual particle pairs advancing at the speed of light. Because these fields activate an observable force and acceleration at electric charges, it means that the observable energy at these charges is generated locally from space-time, or the quantum-vacuum. When all observable energy is generated locally from the quantum-vacuum, then the reason for the energy conservation must first be identified, because the assertion that energy simply cannot be generated from apparent "empty" space is no longer correct.

An electromagnet for example generates a potential flow <u>with</u> an observable energy input.

A permanent magnet likewise generates an identical potential flow, but <u>without</u> an observable energy input.

Because the generated potential flow is again converted into an observable energy form at another charge in both cases, the question is why the observable energy is conserved in connection with both systems. The reason for the energy conservation in connection with an electromagnet must be different from that in connection with a permanent magnet.

Classes of self-symmetrising systems, SS1 and SS2 systems

<u>Electromagnet</u>
An electromagnet is a system that generates a magnetic potential flow at a required point of time. The magnetic field is generated only when an observable energy input exists. As soon as an electric current is induced into the electromagnet, the observable electric energy form is converted into a non-observable energy form. That means that the induced electric energy is lost in an observable sense. It now exists in a potential form. To what extent an observable energy form is again generated at another charge with this potential energy form, depends on the further configuration of the electric system.

The electromagnet belongs to a class of electric systems, which is able to generate a potential flow only with the aid of an observable energy input. This system belongs to a class of systems called SS1 systems. A SS1 system denotes a self-symmetrising system of the first class. A special feature of SS1 systems is that the input dipole is destroyed by the existence of a load.

Permanent magnet

A permanent magnet is also a system that generates a magnetic potential flow similar to an electromagnet. The generation of this magnetic field requires no observable energy input. The energy used for the activation of the permanent magnet only serves to align the magnetic dipoles in the alloy of the permanent magnet. Such an activation is sometimes compared with a charging process. This term however is not a good choice. A charging process therefore does not exist because a permanent magnet cannot store energy in the static sense. The permanent magnet is the constant activator of a polarisation of virtual particle pairs, which, emanating from its surface, propagate in space-time at the speed of light.

The observable energy, generated in connection with this vacuum polarisation in the external world from the point of view of the permanent magnet, is – as usual – a purely local effect of the quantum-vacuum. When and where observable energy is generated with the aid of this potential flow likewise depends on the further configuration of the electric system.

A permanent magnet belongs to a class of electric systems, which can generate a potential flow without an observable energy input. This system belongs to a class of systems called SS2 systems. A SS2 system denotes a self-symmetrising system of the second class. A special feature of SS2 systems is that the input dipole is not destroyed when performing a task.

A simple electric motor

In the electric motor presented here the electromagnet is situated on the outside of the housing. A permanent magnet is attached to the armature of the driveshaft.

In a simple electric motor an electromagnet, a SS1 system in other words, is used to generate a force and acceleration onto a permanent magnet, a SS2 system.

The sequence of vacuum polarisation in an ideal electric motor

1. The induction of observable energy into the coil (SS1) generates an input dipole in and at the electromagnet. The input dipole, which represents a broken symmetry of space-time, integrates a part of the energy from the quantum-vacuum and thus generates a magnetic potential flow. The input energy is thereby lost in the observable sense.

2. Subsequently the magnetic potential flow propagates in space-time at the speed of light. Because the permanent magnet (SS2) is situated in the interaction range of the polarised space, the space-time in and at the permanent magnet becomes asymmetric. The now aligned, locally appearing virtual particles pairs generate a force directly in and at the permanent magnet. That accelerates the rotor. The energy at the shaft of the electric motor therefore does not derive from the electric input energy, but from the local quantum-vacuum. The electric energy, which is fed into the coil, basically has nothing to do with the mechanical energy at the shaft. The induced energy at the SS1 system is not the cause of the polarisation it is only the initiator.

3. Depending on the load on the axis of the electric motor a reflecting/reverse vacuum polarisation is formed, which, emanating from the permanent magnet, propagates in the direction of the electromagnet. As soon as this reverse polarisation arrives at the electromagnet, it contributes to the destruction of the input dipole. The reflecting/reverse running vacuum polarisation leads to the braking of the electrons, causing the magnetic field at the electromagnet to weaken and diminish.

4. When no further electric energy is induced into the electromagnet to maintain the input dipole or to regenerate it, the motor does not move. The reason, why the electric input energy and the mechanical output energy is conserved in an ideal system, has to do with the fact that the energy (from the quantum-vacuum) that destroys the input dipole is exactly equal to the amount of energy (from the quantum-vacuum), which is generated at the load.

SS1 system

To simplify the situation we will first look at the conservation of the energy only at the SS1 system.

The SS1 system needs an observable energy input to generate a magnetic potential. The input energy is at first transferred to the quantum-vacuum and converted into a potential form. Firstly it is irrelevant whether observable energy is extracted from this potential flow or not. If observable energy is extracted from another charge carrier situated within the area of interaction, then, emanating from this charge carrier, the quantum-vacuum is polarised back to the direction of the input dipole.
This reflecting/reversing polarisation contributes to the destruction of the input dipole. If observable energy is generated at another charge carrier, a permanent magnet for example, from the magnetic potential flow from an electromagnet with a COP of 100%, then the observable energy is instantaneously conserved. If observable energy is generated from the magnetic potential flow with a COP of less than 100%, it means that the observable energy is not conserved at first. A part of the observable input energy is now still existent in a unused potential form. Since observable energy can still be generated from this unused potential flow, the situation is still such, that the observable energy is conserved in the end.

SS2 system

In the SS2 system the situation presents itself slightly differently. The permanent magnet is a constant generator of magnetic potential without an observable energy input. We imagine a permanent magnet, which moves along a magnetic body. When a magnetic body approaches the permanent magnet, observable energy is gained during the approach. If one takes a look only at this movement section, a certain amount of observable energy is actually gained and the energy is not conserved. Should the magnetic body be removed again, the same amount of energy as gained before must be invested. In contrast to the SS1 system the dipole of the permanent magnet is not destroyed during the entire movement. For the external observer, the conservation of the energy is maintained by means of a geometry-symmetric movement between the magnet and the magnetic body.

That is why the reason for energy conservation at an SS1 system differs from an SS2 system.

In case of SS2 systems, it should be kept in mind that from the view of the permanent magnet the conservation of energy does not apply. Firstly, the permanent magnet generates some energy by attracting the magnetic body to it and then it actually produces the same energy, when the magnetic body is removed. After all, the permanent magnet has to regenerate the same energy to counteract the external observable input energy, which is used to remove the magnetic body. So to what extent the energy equation is symmetrised in the external world of the permanent magnet and thus conserved, is irrelevant from the view of the permanent magnet. A permanent magnet always generates a magnetic potential flow in any event and, therefore, represents a permanent source of “virtual energy”. The observable energy gain and anti-gain (loss) is geometry-symmetric only to the external observer and therefore also energy-symmetric (energy conservation).

The following diagram classifies several electric systems into the respective SS classes.

	SS1 System Potential flow generator with observable energy input Energy conservation via destruction of input dipole		SS2 System Potential flow generator without observable energy input Energy conservation via geometry-symmetric course of movement	
	SS1-A	SS1-B	SS2-A	SS2-B
	Potential flow generator with observable energy input, and destruction of input-dipole with, but also without a load.	Potential flow generator with observable energy input, and destruction of input-dipole only through load. When no load is present then it is a potential flow generator without observable energy input.	Potential flow generator without observable energy input, without destruction of input-dipole through load.	Potential flow generator without observable energy input, with destruction of input-dipole through load.
	Electromagnet	Battery	Permanent magnet	Battery
Energy input:	electric	chemical,	quantum-vacuum	
Dual role:	yes, resonance coupling	yes, resonance coupling	yes, resonance coupling	
	Solar cell	Coiled spring	Electron	Coiled spring
Energy input:	light	mechanical,	quantum-vacuum	
Dual role:	yes, resonance coupling	yes, resonance coupling	yes, spin and resonance coupling	
		Gyroscope	Atomic nucleus	Gyroscope
Energy input:		mechanical	quantum-vacuum	
Dual role:		yes, electron spin	yes, spin, and resonance coupling	

Thermal resonance coupling is conceivable in several systems and with electromagnetic waves and the quantum-vacuum.

There are many known experiments, in which it was attempted to combine SS1 and SS2 systems in a magnetic motor setup. The goal is to generate more observable energy at the output than was previously fed in at the input dipole in an observable form. Obviously this goal has not been reached up till now. It therefore does not matter how one combines SS1 and SS2 systems, either the input dipole is destroyed in the SS1 system or the observable energy is symmetrised via the geometry-symmetric course of movement in SS2 systems.

However, there is one exception!

Since one cannot break the energy conservation principle, or the self-symmetrising mechanism, one must attempt to circumvent it. When an electric system should generate more observable energy at the output than previously induced in an observable form, then the SS2 system must receive a dual role. The SS2 system is the permanent magnet in the simple electric motor described above. Since the permanent magnet already generates a potential flow in a permanent manner without the use of an observable energy input, it can only be the SS2 system that ultimately generates the excess energy at the output.
In other words, the permanent magnet should do more than what the magnetic field of the electromagnet pretends to do. In a manner of speaking the permanent magnet must accelerate faster than the induced energy at the electromagnet allows.

How can that function?

When the permanent magnet should accelerate faster than the electromagnet allows, energy must be conducted to the permanent magnet from an additional external source of energy.

However, since the permanent magnet cannot access another energy source (see diagram on page 7 for possible exception) in ordinary motor configurations, no permanent magnet motor that delivers more energy than was induced before can be built.

Is it then at all possible to produce an electric system that delivers more observable energy than was induced before in an observable form?

Yes, it is possible.

Permanent magnets are not the only SS2 system in existence. An electron for example is also an SS2 system. An electron generates as a permanent magnet a perpetual potential flow. Can observable energy be gained from this potential flow? Yes, it already happens in every electric circuit. Can excess observable energy be gained from this electric potential flow? No, that isn't possible, because the observable energy also symmetrises via the geometry-symmetric course of movement.

However, in contrast to a conventional permanent magnet, electrons can assume a dual role. This additional feature can be the spin or a resonance coupling with an external energy source.

In order to better visualise this situation, we revert to a simple electric circuit with a battery. The electron is depicted as a sailboat. The electron moves through the circuit, because there is an electric "wind".

At a certain wind speed, sailboats move at a certain speed. If we have a wind force of one Beaufort the sailboat moves through the water at a speed of one knot. In the process the sailboat converts wind energy into wave energy.

If transferred to an electric circuit, this means that an electron can generate a specific amount of light and heat at a certain voltage. In a light bulb the electron converts the electric wind asymmetry into light asymmetry and heat asymmetry.

As mentioned above, the electron can not only utilise the electric potential flow for its own movement, but it is also capable of resonance coupling with an external source and it possesses spin characteristics. If transferred to a sailboat, it means that the sailboat has a motor. When the sailboat switches on the motor while it is moving through the water, the sailboat can sail faster than the wind allows. When the sailboat or the electron moves faster than the wind or the voltage allows, then more observable energy can be generated at the output than only induced by the electric wind. The additional energy derives from the petrol supplied to the motor or in case of the electron from the spin or a resonance coupling.

Since e. g. the spin does not need an observable energy for its own existence and maintenance, but is maintained through a process of interaction with the quantum-vacuum, then in this way additional energy can flow into the system from the quantum-vacuum.

In case of a resonance coupling, it is important what kind of resonance coupling we are dealing with. An electron for example is able to resonate with electromagnetic waves. A conventional radio is such an example. In a radio the electrons (SS2) in the antenna resonate with an externally generated electromagnetic source of energy. The energy that flows into the radio is then mixed with the self-generated energy, which derives from a battery (SS1-B) for example. However, since the electromagnetic wave is generated with the aid of an observable energy input, additional observable energy cannot be generated this way. Even when a radio is not meant for energy generation – it is an example of how energy from an external source can flow in.

However, when an electron resonates with an energy source, which is generated without an observable energy input, then more observable energy is indeed generated. When electrons resonate with the quantum-vacuum, then observable energy is generated from the quantum-vacuum. Quantum fluctuations generate vibrations in all materials. When these fluctuations reach a certain degree of coherence, it can hyper-energize an electron.

SIBA silicate battery or crystal cell

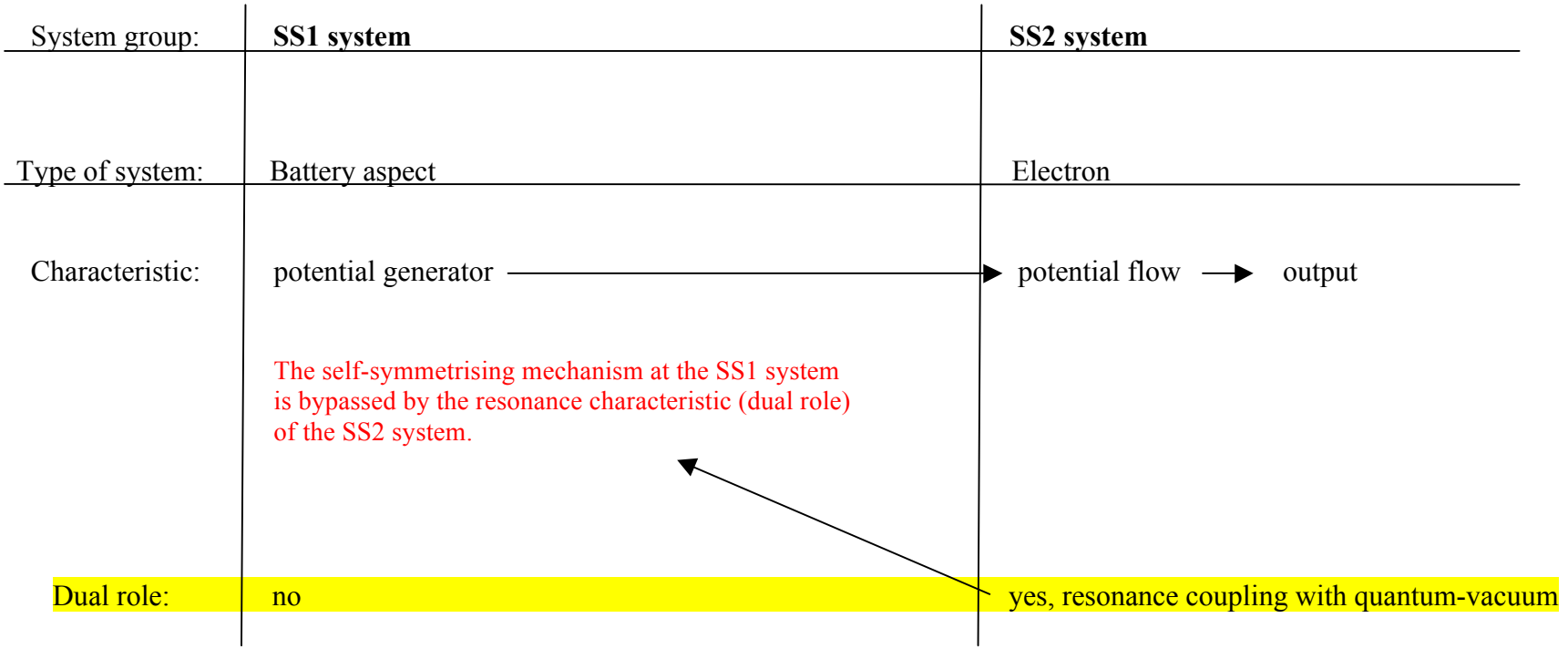
Based on its composition the crystal cell is a device similar to a battery, which is able to generate a weak electric direct current (DC) emission-free over an unknown period of time. It is under permanent load since 1999. Instead of a liquid electrolyte it contains a solid polycrystalline silicate. The silicate takes on the role of an energy converter.

Since there is no electrolyte in the crystal cell, the inflowing and outflowing electron current cannot activate a chemical reaction. If no chemical reaction takes place, the electrochemical input dipole is not destroyed. The electric voltage among others is generated by an electrochemical potential difference. Because the input dipole stays intact, the electrochemical potential difference is maintained. The functioning principle of the crystal cell is based on the fact that a way was found to attain a charge separation inside the crystal cell.
To achieve this, several physical effects are combined. One important effect is a resonance coupling within the silicate between the electrons and another energy source. The purpose of this additional energy source is to maintain the input dipole or to constantly regenerate it. Because the additional external energy source is the quantum-vacuum, this means access to a consistent and emission-free energy source which never ceases. The resonance coupling with the quantum-vacuum now assumes the role of the chemical reactants.

SIBA silicate battery or crystal cell

	SS1 B system (battery aspect) Input energy	SS2 system (electron) Output energy
Energy conservation:	Energy conservation via destruction of the input dipole, only when load exists. The (chemical) input dipole is not destroyed in the SIBA.	Energy conservation via geometry-symmetric course of movement
Dual role:	no	yes, resonance coupling
Energy flow	Input energy (chemical reaction) is transferred to the quantum-vacuum (lost). There is no chemical reaction in the SIBA!	Output energy (electric potential flow) from the quantum-vacuum
Energy input:	chemical input dipole → potential difference → electric potential flow → output The electro chemical potential difference generates the input dipole. Battery aspect only serves as a trigger! There are two input dipole generators in the SIBA, on the one hand the chemical potential difference and on the other the resonance coupling with the quantum-vacuum.	and Energy from the resonance coupling with the quantum-vacuum maintains the input dipole. Resonance coupling replaces chemical reactants

SIBA silicate battery or crystal cell



The energy flowing in via the dual role of the SS2 system can be conducted directly to the load or it is used to maintain the input dipole. An asymmetric electric system is a system that discharges more observable energy than the observable energy that was induced. The excess energy derives from an additional external virtual energy source, the quantum-vacuum.