

GEORGE SPENCER-BROWN

# LAWS OF FORM

For Tessa

With the best wishes

from the author

England 2009 April 4<sup>th</sup>

BOHMEIER VERLAG

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## A note on the mathematical approach

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The theme of this book is that a universe comes into being when a space is severed or taken apart. The skin of a living organism cuts off an outside from an inside. So does the circumference of a circle in a plane. By tracing the way we represent such a severance, we can begin to reconstruct, with an accuracy and coverage that appear almost uncanny, the basic forms underlying linguistic, mathematical, physical, and biological science, and can begin to see how the familiar laws of our own experience follow inexorably from the original act of severance. The act is itself already remembered, even if unconsciously, as our first attempt to distinguish different things in a world where, in the first place, the boundaries can be drawn anywhere we please. At this stage the universe cannot be distinguished from how we act upon it, and the world may seem like shifting sand beneath our feet.

Although all forms, and thus all universes, are possible, and any particular form is mutable, it becomes evident that the laws relating such forms are the same in any universe. It is this sameness, the idea that we can find a reality which is independent of how the universe actually appears, that lends such fascination to the study of mathematics. That mathematics, in common with other art forms, can lead us beyond ordinary existence, and can show us something of the structure in which all creation hangs together, is no new idea. But mathematical texts generally begin the story somewhere in the middle, leaving the reader to pick up the thread as best he can. Here the story is traced from the beginning.

Unlike more superficial forms of expertise, mathematics is a way of saying less and less about more and more. A mathematical text is thus not an end in itself, but a key to a world beyond the compass of ordinary description.

An initial exploration of such a world is usually undertaken in the company of an experienced guide. To undertake it alone, although possible, is perhaps as difficult as to enter the world of music by attempting, without personal guidance, to read the score-sheets of a master composer, or to set out on a first solo flight in an aeroplane with no other preparation than a study of the pilots' manual.

Although the notes at the end of the text may to some extent make up for, they cannot effectively replace, such personal guidance. They are designed to be read in conjunction with the text, and it may in fact be helpful to read them first.

The reader who is already familiar with logic, in either its traditional or its symbolic form, may do well to begin with Appendix 2, referring through the Index of Forms to the text whenever necessary.

## The form

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We take as given the idea of distinction and the idea of indication, and that we cannot make an indication without drawing a distinction. We take, therefore, the form of distinction for the form.

### Definition

*Distinction is perfect continence.\**

That is to say, a distinction is drawn by arranging a boundary with separate sides so that a point on one side cannot reach the other side without crossing the boundary. For example, in a plane space a circle draws a distinction.

Once a distinction is drawn, the spaces, states, or contents on each side of the boundary, being distinct, can be indicated.

There can be no distinction without motive, and there can be no motive unless contents are seen to differ in value.

If a content is of value, a name can be taken to indicate this value.

Thus the calling of the name can be identified with the value of the content.

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\* There have been so many jokes about this that I had better point out that I was employing "continence" in its original sense of "containment", not in its later usage as "sexual abstinence" – Author, reviewing this text 2000-06-27

### **Axiom 1. The law of calling**

*The value of a call made again is the value of the call.*

That is to say, if a name is called and then is called again, the value indicated by the two calls taken together is the value indicated by one of them.

That is to say, for any name, to recall is to call.

Equally, if the content is of value, a motive or an intention or instruction to cross the boundary into the content can be taken to indicate this value.

Thus, also, the crossing of the boundary can be identified with the value of the content.

### **Axiom 2. The law of crossing**

*The value of a crossing made again is not the value of the crossing.*

That is to say, if it is intended to cross a boundary and then it is intended to cross it again, the value indicated by the two intentions taken together is the value indicated by none of them.

That is to say, for any boundary, to recross is not to cross.

## Appendix 6

### Last Word

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Existence is a selective blindness.

Use 'blindness' as paradigmatic of any sense, e.g. 'deafness', 'tastelessness', etc.

We notice one side of a thing-boundary at the expense of paying less attention to the other side. We notice a dish to be washed up in the sink by paying scant attention to the not-dish universe that our definition of the dish-boundary equally defines. Were we to pay equal attention to both sides, we would have to attribute to them equal value, and then the dish-boundary would disappear. The dish's existence would cease, and there would be nothing to wash up.\*

We do exactly the same with ourselves. When we die the self-boundary eventually disappears. Before it did so, we ascribed a huge value to what we called 'inside' of ourselves, and comparatively little value to what we called 'outside'.

The death experience is thus ultimately the loss of selective blindness to see both sides of every distinction equally. This by definition is absolute knowledge or omniscience, which is mathematically impossible except as equated with no knowledge at all. In the ascription of equal values to all sides, existence has ceased altogether, and the knowledge of everything has become knowledge of nothing. The well-known, and often-attested, ecstasy experienced as an end of existence approaches, is occasioned by the relief from the heavy constraint of our senses, that all existential modes demand, when the confinement of body-location is at last lost altogether.

In other words, the difficulty of maintaining what we call 'life', which all beings experience, is precisely the difficulty of maintaining the appearance of any particular mode of existence, so that it continues to appear recognizably the same. In protecting our physical bodies, we protect, identically, the universe that each of them creates. Our desire to be immortal is a desire that this universe shall never change, and once we see the desire for what it is, we see it not only as impossible, but also as undesirable.

The knowledge of nothing, which is what the knowledge of the form discovers, is the potential for all further existence that might arise from any selective application of value anywhere anytime. (As we selectively applied it in this book.)

Suppose there to be but one being who is, and applies, value selectively, according to this being's original disposition. The "outside" universe that appears to it is evidently (by definition) an *exact* reciprocal of its selection.

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\* When we say we wash the dish, we do in fact nothing at all to it: we do it to the rest of the universe that we scrape off, to give the dish a clean border.

Now clone this being into exact clones, each with exactly the same selective disposition. Mathematically, all the clones would be indistinct, so to ascribe to them a number would be meaningless.

Suppose one aspect of these clones is exactly so, so that in this aspect they are all identical, both in what they 'are' and what they 'see'.

Suppose in a second aspect they are identical in all except spatial position (like the crosses in an expression from the primary arithmetic).

Suppose in a third aspect they are identical in all except temporal position.

In aspect 1, the universe that each clone experiences is definitively the same.

In aspect 2, the universe that each clone experiences is identical in all respects except perspective. What some two of them experience is a universe that is evidently 'the same' for each, but as seen from 'a different' point of view.

In aspect 3, the universe of each clone appears different in its temporal aspect, recognizably 'the same' except for a change between what is called 'before' and 'after'.

Suppose some of the clones are not quite identical. Now what one of them sees in the outside universe will not be quite the same as what the other sees, and there will be some disagreement in respect of what is 'really there'.

Continue this disidentification of clones to the limit, so that what one sees is wholly different from what the other sees. The two universes are now so different that there is no possibility of communication, or indeed of interaction of any kind, between them, and one can have no knowledge of the other. We could call them 'anticlones'.

Now let us return to aspect 1 of clones: complete identity, apart from space and time. In this aspect, the 'inner' experience or 'thoughts' of the one are intimately known to the other, giving rise to the known phenomena of wrongly so-called 'telepathy' when it overflows into aspect 2, and wrongly so-called 'memories of previous existencies' when it overflows into aspect 3. There is no signal of communication, in either case: merely a shift of attention from one aspect to another.

The 'negative' side of death is that there is no future in it for the dead being, simply because no universe whatever can appear except as a selective attention of some being. If the being itself can not be found, then nor can the universe.

The 'positive' side is, Well, if the dish disappears, we do not have to do the washing up.

Religions are various fictions to make the 'negative' side seem less unpalatable. They emphasize the 'no more washing up' side, at the expense of ignoring the 'there won't be any you to do it anyway' side. They are not ultimately comforting because, deep down, we do not believe them. It is much more comforting to admit the mathematical inevitabilities and to realize that in this is complete community with all beings, who all, at some level, know it to be the same.



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You came into this world as and with nothing, and were assigned a value by being given a name, dependent on which all other names then had meaning.

As our deepest tradition has it, you cannot, on leaving this world, take any of it with you.

Not because it is no longer there to take, although this, as far as you are concerned, is mathematically evident, but more fundamentally, because there will not, eventually, be any you to take it with.

You cannot have it both ways. Either you can see an apparent universe by being selectively blind, or you can see it all equally in which case it must disappear and so must you. Since both in reality are equally possible, but *no more* than possible (the laws of form are *not more* than the laws of the possible), there is really nothing to choose between them.

*London 0429 14 02 1997*