

Chapter 5 The Sign Draft of August 2015

WHAT IS A SIGN?

The process philosophy of signs offers a novel answer to the longstanding problem 'What is a sign?' Some of its motivation, and the underlying puzzle it seeks to address, concerns the historical resistance to the answer: the sign is process. In part, the neglect of this answer is due to its counter-intuitive nature and to the difficulties created by the combination of ideas of reliable signification and process. If the sign is to signify something dependably, how can it also be in process? What would we make of a red 'stop' sign suddenly changing its meaning to 'go' as we walk in front of impatient traffic, halfway across a busy junction? Signification – sense-based communication mediated by a sign – seems to require some sort of constancy between referent and meaning, if only to keep us safe on the roads.

The challenge set out in the first three chapters around the idea of a process philosophy of signs has therefore been how to design the sign as a workable process. The main features identified for the sign as process render it as multiple; as changing intensities of relations; as involving no fundamental distinction between sign and non-sign; and as allowing for critical and creative relations to the world. In addition, I have sought to avoid tying the sign to sciences or to a mode of identification of things in the world. I will now gradually introduce a more formal definition of the sign as a response to these different demands.

Formally, the sign involves two linked processes. First, a sign is a selected set, where selection is an ongoing process rather than the settled outcome of a choice. The process of selection emphasises a series of changing relations between all things brought about by a selection of some of them. It is therefore to pick out things by altering their relations, yet without detaching them from all others. I used the concept of the substratum in Chapter 2 to explain this relation between a selected set and a wider background. A sign is a selected set and its substratum. For example, your name and two

extends widely through bodies, emotions, reactions and actions.

Second, the mode of relations in a sign is a transformation of intensities associated with the selected set and its background relations. Every selection is accompanied by a transformation of values which reflect back on the selection. Your name and two symbols are accompanied by changes in intensities such as your increasing joy at expressing happiness and the reader's growing delight at having caused it. The sign is thus always a selection accompanied by changes in intensive relations open to revaluations as those relations interact.

There is a process of intensive unfolding in the sign. In that sense, it is alive. Selection provides the initial material for reevaluation. Reevaluation plays out the selection and its intensive changes. Later, I will show how this playing out can be represented as a suite of diagrams around the elements of the set and its substratum. The exchange of messages after your confession of great happiness is a way of capturing and shaping this suite of diagrams of changes in intensity.

If you take a piece of paper and draw something on it, then stick the sheet facing out of your window, you are making a sign defined as a selection and transformation of intensities. We do this when we select a poster for our street-facing windows, such as a political statement ('Vote for independence', 'Save the common land', 'Violence is always the problem') or a piece of information ('The barbecue is around the back'). The marks on the paper are a selection against a background which then extends to a set of changes in intensities, such as the enthusiasm you might feel in drawing a red line across a hated figure, but also the shock a passer-by might experience at seeing a beloved symbol crossed out in red. Rising shock and hatred can be directions represented on a diagram that includes figures such as a passer-by.

The sign you have made is then not a fixed relation between something signified and a signifier, such as a loathed politician crossed out in red and the signified 'Do not vote for Professor Purple'. It is rather an ongoing and very wide process: a selecting and a changing of intensities of relations. There would be no point to writing and posting the sign if it wasn't accompanied by changes in intensity such as political doubt or relief at getting the right information. It is therefore inaccurate to think of signs as fixed connections between, for instance, a sense and a referent. This is because the sign is a process of selection before it appears to be a fixed relation. The sign is also a change in intensities before, during and after this merely illusory static connection between two terms.

I described the process philosophy of signs as counter-intuitive because we expect signs to be reliable connectors between things like meanings and referents. This is only partly true since I believe we have a deep sense of the sign as process, in the way we experience our lives in relation to the lives of others as the unstable and ongoing effects of significant choices concerning all of us. When we survive a selection and others do not, when we live on and others die, the lives lived in the shadow of the selection form a sign with it. Motionless images of death as terminal fail as signs of death because they depend on a false cut and abstraction from the other lives which make the sign significant.

A death spreads through the lives of those who live on. It is in this way that it is truly a sign. What is intensity here? It is shifting degrees of relief, gratitude and guilt as they haunt the survivors in the ongoing sign. These ongoing intensities in the signs of death explain why we have to work hard at getting memorials right. We want the memorial to be an appropriate response to ongoing intense feelings and desires, not merely the marker of the date of a death.

Or, to take a more everyday example, when we select something at a market, we change the intensities of relations between the chosen thing and all others; for instance, through growing scarcity or desirability. Market traders know this intensive aspect when they call out prices and descriptions of their wares. They are trying to alter the intensive relations of fear and greed, or need and avidity around

prices and goods such that no price is fixed in the market. This static representation of the sign is an illusion hiding the ongoing and continuous flexibility of prices. This in turn explains how prices change. They do not alter in leaps between static price signs but rather change all the time, as intensities of relations shift continuously with the sign, for example when the intensity of fear increases rapidly with a new piece of information.

Thus when gold is taken for a universal currency the decision can be rendered through the following sign {gold, exchange rate, any commodity}. Any commodity will have an exchange rate with gold at a certain value. Irrespective of opinions about the true worth of gold as an ultimate monetary standard, as a process sign the decision involves a multiplicity of changing relations, for instance to the devaluation of silver. These changes can be rendered in a suite of diagrams, maybe with an axis showing acceleration from a silver direction to a gold one with respect to desirability.

WHAT HAPPENS IN A SIGN?

The relation between selected set, substratum and suite of intensive diagrams means that the sign can be thought of as a wide-ranging feedback loop from a selection and its changes in intensities to further intensive revaluations and back. However, this is an unsatisfactory model if it is presented as a linear feedback: selection – revaluation – selection. Instead, as we'll see from the formal model of the sign, it is concurrent and asymmetrical. So the sign will not be represented as S-V-S' but rather as S/V. The sign does not play out over time, but rather forward and back along a suite of intensive changes. A new intensive diagram changes the values of older ones, for instance in the way an intensive shift towards paper money alters the value of the confidence we once had in gold.

The revaluation runs alongside the selection and they alter one another as they unfold. They are concurrent. They cannot, though, be conflated with one another according to a set of laws or rules or functions. By definition such general laws are given as stipulations over the process sign. Selection and revaluation determine one another such that no overarching principle should be able predict or govern how they will unfold in relation to one another. They are asymmetrical in their concurrent operation.

The suite of diagrams should be seen as a concurrent determination and competition between diagrams. This cannot prove that stipulations over the sign are wrong. It situates them in a realm of critical debate over the sign. For example, a stipulation over the gold sign stating that gold gives the true value of everything because it is in limited supply when compared to paper money, is cause for debate around the gold sign and the sign provides the critical material for this debate.

Imagine a doctor asks you to pick out a picture among others laid out on her desk. You pick out a setting sun, and the doctor nods sagely, but also raises her eyebrows. The picking out is an element of the sign. The nodding is also an element. Something is selected against a background of relations, to other cards, to other gestures {setting sun, you, illness, doctor}. When this happens a series of values

associated with different relations also begins to change; the selection intervenes in ongoing changes. The selection of the card strengthens its relation to your illness and to a possible cure. It also diminishes the hold of the other cards and of other things, such as ideas and objects. The selections set off value modifications in unpredictable and prospective ways, for instance in the burgeoning of hope and waning of despair, or in the excitement at the possibility of finding a remedy balanced by fear of failure, or in the beginning of shame at an unmasking and relief at exposure.

The selection of the card is a process, that is, for it to be significant it must not be simply thought of as 'this card here and now' but rather as 'this card against the background of all the others and as what it is doing to itself and to the others'. In this doing, the card is in feedback with the others. The feedback is mediated by revaluations independent of the selection, for instance the doctor's reaction, then your reaction to it. This process is not linear, though, and the selection as unfolding process runs alongside the shifting in values.

The difference is between representing the patient and doctor relation as P-D-P, as if a camera shifted from one face to the other and back, and P/D, as if two cameras allowed a filmmaker to produce a split-screen film where the faces run together for the audience. The split screen allows for two durations to unfold together as process rather than limiting each one to the start of the other. A sign is not a process of move-countermove-move which would commit the philosophy to a limited account of the sign according to a form of dialectics, since it would break and develop at each shift of perspective and topic.

The sign is a process of mutual, concurrent and, in principle, unlimited unfolding back and forth. 'In principle', given the practical requirements to treat signs within artificial boundaries, for explanatory purposes for instance. The selection decides on the ongoing perspective (P/D) rather than changes in perspective deciding on the limits of signs (P then D then P). This means that the sign as process is formally very different to the sign as a fixed relation between terms, where it is a 'sign of' or 'sign to' something. As process, the sign makes relations and values change, rather than indicating them as fixed in a particular space and time, or according to a wider frame such as a language game, a science of signs, or a series of conventions and agreements about meaning.

The process is a multiplicity of changing relations and values. It ranges over all things, not in the sense of everything being a sign, but in the sense of all things being open to be included in selections which make signs. So though we can speak of worlds and realms which are not those of the sign, where the processes are not those of selection and revaluation, nothing is outside the reach of a sign. Anything can be selected into a sign.

By definition, the selection of the set is unconditioned by the things and relations that are selected. The sign as process is not restricted by any rules, definitions, laws or qualities of the things it selects. So the sign as selection is not attached to a referent or to a meaning. It does not denote something reliably, but rather comes about as a connecting process, a change, that is not formally restricted by the fields the sign selects in. Instead of relating a limited number of things, the sign

performs an ongoing operation on all of them by selecting some of them differently and with no necessary preconditions.

This lack of preconditions frees the sign from any essential, natural or logically necessary conditions. Anything can be included in the sign with any set of relations. No guarantees can be given about the mutual conditions of selection and revaluation on each other. Selection is unconditioned as to what it selects, how it unfolds and how value conditions that unfolding. So, for instance, among the pack of cards on the doctor's desk there are no images or associations which have a necessary hold on the selection.

If we followed the usual model for signs, we might think of an image with a picture of a dagger on it as signifying violence and referring to acts of violence we might be repressing, or of an image of a baby as signifying birth. We might think that picking one card with 'yes' on it and another with 'no' was a contradiction. But none of those conclusions would be necessary as properties of the selection; they would only be properties of wider descriptions of the sign according to diagrams of intensive directions and stipulations over signs.

As defined here the sign is partly unconditioned; its selections are free. Later, we shall see that when associations and negations are made in this process philosophy, they follow from intensive diagrams unfolding around the selection and from patterns imposed on signs, rather than from any features of the signs as unconditioned selection. The stipulated patterns define realms that are not those of the process sign proper, since they are determined by imposed codes and laws denying the free selection and the changing series of diagrams for the sign. The sign is therefore split between selected set, suite of intensive diagrams and codes and laws imposed on the sign, the stipulations over the sign.

The patterned realms and any of their components can always be included in a new sign, so the unconditioned selection in the sign maintains priority over conditioned patterns of signs. It is a limited kind of priority, because although each new sign can detach itself from a chain or pattern by selecting it, this secession does not disprove or break the pattern itself. The sign is prior because it can draw up different processes which provide the occasion for critical clashes of patterns but not their resolution. Any resolution is a matter for rules or patterns, but it remains subject to the differences, new potential and critical alarm carried by new signs.

When a patient's hand touches a card, on a given day and in a particular office, according to the definition of the process sign, this selection is always unconditioned. A conditioned arrangement of things in the world is made when we set laws or codes for how a sign ought or must relate, for instance when the doctor imposes a moral judgement on your selection or strictly follows a manual for the interpretation of signs. The patient might submit to a different pattern, perhaps an inner intuition about their illness or perhaps a delusion.

No sign can resolve the clash of rules, laws or interpretations, yet the clash itself is made possible by the unconditioned nature of the sign because it is what maintains a separation between the sign and the codes imposed upon it. The codes have to be imposed over the selection and its intensive

diagrams because the speculative process defines them as unconditioned and resistant to transcendent laws or codes.

So it is not that reference and signification simply disappear from our ways of thinking about the world on this model of process. They are present in two ways: as things that can be selected into the sign and as ways of imposing patterns on signs. The sign can always include referents, meanings and other significations. They can count as things to be included in the sign as multiplicity, since anything can be selected and since the selection carries everything with it as background or substratum.

Referents and meanings are not simply discarded. They are articulated in new ways by any sign, sometimes to be given strong relations to other things, sometimes weak; there will be changing degrees of reference and signification, and the diagram of the sign will describe those degrees as intensive directions, as increases and decreases in speeds and connections. The process philosophy allows for the selection of a signifying sign such as 'dagger signifies violence' as a selected set {dagger symbol, violence}. However, the process version draws the signifier and signified into a much wider web of changing intensities of relations represented by a suite of diagrams without which the process sign will be incomplete.

Reference and signification are also rules or stipulations over the process sign. This is shown by propositions such as 'Every sign must indicate a referent' or 'There is no sign without meaning'. In the second chapter, I studied Wittgenstein's imposition of such rules in the distinction drawn between inert and living signs through use. In the third, I observed restrictions on the sign in biological cases where they were limited to specific circuits for Uexküll. In the fourth, I described how signs were given a limited empirical causal frame by Baptiste and Dupré.

According to the process definition of the sign, propositions and rules are false as adequate descriptions of the sign, even though they might be taken as important as rules or laws for imposing patterns on signs, for example in denying the usefulness of signs which have no referent (Oscar Wilde's second novel) or that can have no referent (Wilde's long and short novel) or that cannot be verified according to a form of life (Oscar Wilde's private language diary).

The definition of the sign as unconditioned is therefore not a commitment to chaos and lack of determination. First, the sign is the site of determined but changing relations. Though the selection is unconditioned, the relations in the sign are relative and there will be a qualified stability in the sign. When the doctor chooses to combine your picture and a common diagnosis, the selection is one of high relative stability among many terms in the selection and in its relation to a background. The diagram of the sign will indicate a strong pull between the direction of diagnosis and other relations. Second, though the sign itself is an unconditioned prior selection and process, series of signs can be given rules or laws which impose patterns on them and thereby define realms. Why then can't the relations in the sign be strengthened to the point where some take on a kind of necessity?

The sign remains an unconditioned selection despite prevalent patterns, trends and directions, because it is always in process. Changes in the unfolding of intensities recombine relations between things and disrupt supposedly stable patterns. For instance, though a medical practice can remain stable

over very long periods, it is always possible for researchers to recombine symptoms and pathologies under the same name. It is because the sign is open to such novel groupings that we can refer to new entities while maintaining contact with many elements of the old. It is also for this reason that the sign has a critical and creative role, since its capacity to detach itself from prevalent states while including their elements allows for novel angles. A set of symptoms, the name of a disease, a pathology and proposed cures can be recombined in new ways offering critical and innovative angles in line with new discoveries or shifts in social practices and expectations.

It is essential, however, not to confuse the potential for the sign as invention and alarm with scientific demonstration. The fact that signs incorporate things in the world in no way justifies the validity of their relations as causal, probabilistic, or as reflective of forms of social consensus. The sign is accompanied by value shifts and these can take on weight as emotion or desire, but exactly because the sign is unconditioned these must be supported by other sources of validity before conclusions can be arrived at about states of the world that the elements of the sign are taken from. Since the sign is fundamentally unconditioned it is neutral with respect to validity. The fact that a sign has been proposed is no justification for the truth or importance of what is suggested. In Chapter 6 I discuss this important property of the process sign, as defined speculatively, in contrast to objective definitions for the sign in structuralism.

With the aim of providing an illustration contrasting with the sciences, it is helpful to turn to art to demonstrate the priority of selection over signification and reference. The arts can take familiar signs and recombine them in new and unexpected ways which point to novel relations and intensities of values for relations. This in part explains the ever-present critical potential of the arts and humanities as creators of new and disruptive signs when they are released from objective demands and from subservience to the sciences through forms of naturalism.

This iconoclastic power of the arts and humanities demonstrates the possibility of open selection in signs, for instance in the many ways artists have taken up national flags and symbols and transformed them to maximise an aesthetic and critical impact. Rules such as banning the burning of flags or associations of the flag with the nation as an homogeneous entity are brought into question by art and in novel concepts in the humanities because the relations in the sign can always be selected differently.

The process philosophy of signs claims that this openness depends on the unconditioned nature of the sign as selection and revaluation, but it remains opposed to ideas of essential truth for the arts or humanities in their selection of signs. Such arguments for the value of the arts are stipulations over signs rather than insights into the nature of signs as open process. The power of the arts and humanities is in creativity and critical alarm combined with debate with other claims to truth.

INTENSITY AND VALUE

The second reason for the intrinsic instability of the sign is more subtle than unconditioned selection and stems from the role of value as the second process in the sign. As selection, the sign is accompanied by an independent variation in the intensities of values of all relations. By value, I do not understand a given number or degree, but rather variation in the intensity of a relation. Whereas unconditioned indicates an absolute freedom in the sign, independence in the variation indicates a relative freedom. Revaluation varies independently over the selected relations of the sign and conditions their unfolding. To return to the example of survival, there are in principle no limits to how the selection of a sign might reassign relations between a survivor and an environment, from almost complete indifference to nearly total obsession with a death, for instance.

Nonetheless the sign is a selection of some things and their relations and revaluation is over the relations determined by the selection. Revaluation in the sign is therefore limited by given relations between the selected things. It is relative to them. Yet this provides it greater power over the sign, if by power we understand direct influence. Different signs can select different things and relations, such as survival around individuals or survival around blood lines. Variation in intensity then changes the emphasis within the different signs, for instance by emphasising particular types of individuals in one sign or particular aspects of blood lines in another.

A good way of understanding these points is through distinctions drawn between the freedom of an act of choice, the relative determination of any consequences of the choice, and the independence of those consequences in relation to what the choice might have hoped to achieve. Let's say you encounter someone who appears to be in need. You make the free choice to help them. Freedom is by definition, here; it is important to realise that stipulations over the sign can deny it, for instance by demonstrating unseen causes behind a decision. For the process sign the unconditioned state is given by definition, irrespective of whether there really is freedom of choice. The choice to help then determines a situation; for instance, the person is now helped, whether they like it or not. However, though the situation is determined by the choice, it is not determined in how it then plays out. Your intention might have been to help, but in fact you have insulted someone and they reject you. The sign is unconditioned selection, change in the intensities of relations determined by the selection, and revaluation of those intensities and of the selection.

Unconditioned selection works in part as a block or barrier to imposed order. Its power is to mark a point of unfeasibility, such as the impossibility for an imposed pattern of signs to lay claim to necessity when counter-signs can be selected against it. Conditional revaluation marks particular relations and its power is to pass into them. It only ever plays out independently, rather than marking a halt to a process or pattern. A revaluation such as an increase in the intensity of relations to guilt can destroy the claim to total indifference in a sign of survival. This is a greater and more precise power because it works on the potential of the sign, understood as an unfolding described by an intensive diagram.

Revaluation as change of intensities influences how a selection stretches out, how it acquires new potential and alters in current ones. If selection is defined as the process whereby relations extend between things, valuation is the process which disrupts selection as a smooth and determinate

unfolding. It is why the sign cannot be taken as a causal process where an initial choice is followed by a set of inevitable consequences. It is also why a sign is not even a probabilistic process, since the revaluation reassigns intensities of relations and thereby reassigns distributions of probabilities. Yet it is also why the sign has some consistency since variation operates on the relations of a particular sign, on its unfolding diagram, rather than interrupting it and bringing about a new one.

When you select a card you make a new sign for the doctor and for yourself, but this sign always remains unstable. Something in it drives it outward unreliably. Its points of interest and importance shift. They are driven by changes in intensity independent of the relations of the selected sign. For instance, your selection might make her uneasy in her current diagnosis and generate a new line of thought. Perhaps she begins to suspect you are playing a game or harbouring some terrible secret. The sign as selection is completed and disrupted by this new potential, the change in values of the sign. Similarly, her reaction to your choice of card plays on your control over it. Her gestures show she knows you are faking, changing the many relations in the sign from your dissembling to her understanding.

Aren't these descriptions of patient and doctor objective claims, thereby contradicting the definition of the sign? When describing the sign and its intensive changes in relations, I am giving a description of a diagram for the sign rather than an objective description of a state of affairs. It is a suggestion for a picture of the changes brought about when selecting a sign and drawing up its intensive changes. The distinction is between speculative hypothesis, which can then enter into dialogue with matters of fact and other theories about them, and descriptions which lay claim to a different and non-speculative access to the matter.

In the sign, selection and valuation run in parallel, they are concurrent. They do not run on independent tracks, though, and instead determine one another differently. The selection provides the material for the valuation in setting up stronger or weaker relations between things. Valuation then works on these relations by varying their intensities. There is therefore an asymmetric relation in the sign as process, between the process as selection and an accompanying change in values. This asymmetry conditions both processes of the sign in so far as the ongoing selection is altered by a change in the intensity of its relations and the revaluation is constantly responding to the unfolding of the selection.

If we take the familiar image of a line-up of possible perpetrators of a crime in front of a victim, we might think of the sign as the fixed relation between the meaning 'That one did it' and the person identified in the line-up as articulated by a pointed finger. The sign is then a fixed meaning-pointing-thing relation. According to the process philosophy of the sign this is wrong because it misses how the selection unfolds and it abstracts from the changes accompanying this unfolding. The sign is a relative 'picking out' and hence also a 'leaving be' which reverberate through a world. It is also, though, a 'stirring of values', where stirring has its emotional sense of turmoil and mix of intense variations played out on relations.

When the finger points at the supposed perpetrator the others become blameless. That's not the only changing relation, though, since these know of no necessary limits. Some closer ones are easy

to connect. Hypothetically, the crime becomes solved. The legal case begins. Those not picked out restart their lives. Their families become the families of unblemished citizens, just as the children of the perpetrator, in their homes and beds, become the offspring of a criminal, as a prison cell becomes a place for the guilty one, and lawyers, judges and jury members become those who will defend and judge, while an executioner is prepared and a new way of killing thought up and put into practice.

To take another example, from language this time, when a word is picked out as the right one to begin the next line of a poem, the word is selected against the background of all words and all texts and its relation to them is now changed because of its situation in the poem. The word as sign is a new multiplicity of relations not only in the poem, but in principle in all things that can be selected. However, it is not only that the word has new neighbours and new associations. When it acquires these, it also changes values such that all things are not only related differently, but this new relation is the site of ongoing changing intensities, defined as the potential attractions and repulsions for the relations. So the positioning of a word in the poem is not only a process of selection, of a word against other words, it is also a process of valuation, of changing intensities of relations between words.

As sign, a selected word is therefore two mutually determining processes. On the one hand, once the word enters the poem or indeed any sentence, or crosses any lips, it sets off changing relations to all words and things according to the situation of its selection. The word is world. One way of feeling and understanding this is when our names crop up as names for others in unwanted or uncanny circumstances. The selection of 'James' for 'James the impaler' inflects my own name. We sense this burden and possibility when we choose names for our children or when we fight to renounce a patronym or gendered designator. On the other hand, once the word is selected as sign, it becomes open to variations in intensity beyond the directions of the selection and its situation; sometimes we become our name, sometimes we grow away from it. A name can fade on us to the point where we have to change it, or it can grow on us to the point of the folly of wanting it to live on unchanged forever.

We might think we select a word in an argument in an instant, as the right thing to say to indicate a meaning and bring out a referent at a crucial point. 'You fool' we say, assuming we have simply connected the meaning of 'fool' with our interlocutor in a particular moment and space. That's all wrong, though, because the selection of the word is a process sign. It spreads out beyond any instant and changes meaning and referent as it is uttered.

The word is accompanied by an intensive diagram of strengthening and weakening relations. We know this best when our aim is too good or too bad and the right word wounds or angers as it hits and for a long time afterwards. 'You fool' we say, and the face in front of us crumples or hardens. The face and its turmoil of emotions reflect back on the chosen word, shifting it from right to wrong as the sign unfolds. Words cannot be taken back, not because they pass away as past presents, but because as signs they continue to spread out in multiple relations as ongoing processes, always beyond our control.

Children and those new to a language are often closer to this effect of intensive revaluation in signs because they have a less well-grooved hold on the standard sense of words. They feel their

strangeness and their power more deeply. It is easier to damage and delight newcomers to language because the effect of words running through relations and changing them is still raw. This does not demonstrate a lack of understanding and a need for better instruction in the proper sense of words. It reveals the way in which words are doubly unstable for all of us.

We might think instruction can rid us of this instability. We become grown-up language users, where language is a realm defined by the rules of language games. This is only an illusion, though, since the process work of signs is still there under the appearance of fixed meanings and referents, of grammatical rules and structural relations. Signs and their processes are the pressure point where novelty and critical divergence enter the game.

So maybe you think the pointed finger, the uttered 'he did it', and the indicated person in the line-up form a fixed relation, either something stable over an instant or a limited period of time, or something eternal or outside time. How then do you explain the fact that its relations move and spread out in waves of changes? Perhaps you think the children instantly become the offspring of a monster, and the executioner instantly the one who will rid us of an eternal evil? This is where variations in the intensity of values accompanying selection breaks with the idea of fixity in the relations of the sign.

Relations are not unchanging connections between terms but rather ongoing transformations as relations in a selection accompanied by revaluations. The sign as process is many lapping waves, a two-sided rippling of intensities, relations and things. The sadness of the child, regret of the perpetrator, guilt of the executioner and forgiveness of the victim grow and fade in the sign. Worlds do not change instantaneously at the whim of a sign. Signs change through worlds according to diagrams disturbed by variations in intensities.

Why aren't those variations in intensity open to some kind of linear treatment alongside the selection? Hasn't the line-up example given us two of them: one spatial and one timely. I said 'some are closer than others' and things 'grow and fade'. Doesn't this imply a spatial relation between elements in the sign? If it does, might there not be a causal account of the relations that can supplant the idea of the sign as process, for instance in tracing the causal chain from the identification of a parent as a criminal and the breakdown of a child? Do not growing and fading take place over time? If so, isn't there a single time or series of relative times allowing us to relate all the elements of the sign?

The definition of the sign given here makes no prior commitment to space or to time. The sign is outside space and outside time because the processes constitute the sign before it is situated at any particular spatiotemporal location. The sign is immanent to the processes rather than to a location somewhere and at some time. Immanent means there is nothing outside the unfolding and mutually determining processes as they make the sign become and as they are captured in successive and experimental diagrams.

The sign is therefore self-sufficient; it requires no prior space or time for its definition. This independence of the sign and strict immanence to its processes also applies to other determinations. There is no subject of the selection, or goal for the unfolding, or law governing it. The sign is defined as immanent process in an unstable double becoming determined by selection and revaluation. The

relations in the selection are intensive in this definition, since they are a matter of greater or lesser emphasis and intensity, rather than a matter of extensive position in an external space. Closer and more distant are then metaphorical for the relations of the sign.

However, it is harder to dispel time than space, since when I use terms such as 'unfold' this appears to commit the sign to a kind of order which appears to be close to the linear kinds of time we tend to ascribe to human experience and historical events. They unfold as the present passes away and the future arrives. Yet there would have to be a different time for each sign because each one unfolds according to different intensive revaluations. They unfold according to different speeds and intensities. They also unfold in a dual and disrupted manner which takes the sign far from the idea of a homogeneous time in which all events occur. If the sign as process is to be taken as defining a form of time, it will be very different from any we are familiar with. Homogeneous time cannot be prior to the sign.

FORMAL DEFINITION OF THE SIGN

I have spoken about a formal definition of the sign but up to this point the definition has only been formal in the sense of giving a pared down description of the sign. The advantage of truly formal definitions of the sign is that they provide a model for wide applications and give a structure for understanding the implications of the sign. There is a downside though, from the point of view of process philosophy, since formal representations have a contingent yet strong tendency to reinforce ideas of fixity in the sign. This is because a formal representation appears to be motionless in its components and their relations. The lack of movement is purely dependent however, and hinges on shallow perceptions of movement in the image.

There is more movement in even a simple formal equation than in many dynamic images and we only miss this because we sometimes fail to sense and understand the implications of the equation; for an engineer, the equation of a wave is motion not rest. Process and stasis, movement and fixity, are not properties of forms such as representations. As images, it is down to the debate with stipulations around the lines, words and numbers as to whether formal models are fixed or in movement.

For instance, in the representation of the sign as relation between signifier and signified, as S_r/S_d , movement would depend on the meaning given to the bar '/'. It is usually given as S_r relates to S_d in a fixed manner under certain conditions at a certain time, for example 'Red' signifies 'anger according to the following conditions'. By definition, though, there is nothing to stop us defining the bar as a transformation 'By signifying "anger" with "red" the following transformation occurs'. I discuss the bar in relation to signification and structuralist theory in Chapter 6.

The process philosophy of signs is a limited speculative metaphysics which proposes a formal process model for signs in critical debate with other kinds of claims, defined as general stipulations over

the sign. It works speculatively – creatively and critically – alongside the empirical sciences, common sense and intuitions, and against theological and philosophical claims to eternal certainties, whether formal or about specific content. The critical perspective and claim is two-way here, since other positions also challenge aspects of the sign: as material for selection in signs and as sources for possible rules and laws about necessary connections between them.

Here is the full formal definition of the process sign:

$$S\{a, b, c\}/V_s$$

Here are its sub-definitions:

$\{a, b, c, \dots\}$ is a set of elements selected against a substratum of all elements

$S\{a, b, c\}$ is a multiplicity of changes of intensive relations around the elements associated with the selection. It can be represented by a diagram.

V_s is an open-ended suite of further diagrams for the selection

'/' is a two way determination between $S\{a, b, c\}$ and V_s

If we want a simple name for a sign $\{a, b, c\}$ will do; for example $\{\text{white dove, peace, love, now}\}$. The sign is a set. But if we want to draw attention to the intensive shifts in the sign and to call for its diagram to be drawn up we should extend the notation to $S\{a, b, c, d\}$; for example $S\{\text{last dove, dead, climate, human-caused}\}$. This combination of diagram and set is incomplete and potentially misleading, because the intensive diagram is only ever a temporary proposal set over an unfolding sign, a sign that is playing out (for instance, when a more powerful symbol replaces the dove on a diagram). To indicate the requirement for a suite of diagrams indicating the revaluations of the sign we should adopt the full notation $S\{a, b, c, d\}/V_s$. The sign is a set and a suite of competing diagrams for the unfolding of the sign as process.

Here is a simple application:

Open your wardrobe and select one item of clothing, a turquoise shirt, say. This is {turquoise, shirt, today}. The set {turquoise, shirt, today} is a selection of the shirt, obviously over other items of clothing, but less obviously over all things (go naked, or delay the selection, or go shopping, or select the shirt with a tie, with that tie pin, while holding your lover's hand, or cutting ribbons into the sleeves of the rest of his shirts). The shirt colour sign is now named by a selected set rather than the connection between two more different types of component, such as signifier and signified, or expresser and expressed.

Intensively, the selection is a change in the relations around all things. The selection changes intensities in other relations; for instance, in your attachment to another colour as your favourite for Mondays. Try selecting that cut off T-shirt for your interview, or that grey woollen knit tie to get into the latest club and watch the intensive repercussions of your choice spread out like the bow wave of all your lousy sartorial choices. S{turquoise, shirt, today} is shorthand for a diagram of all the changes in intensities of relation brought about by the selection.

S{turquoise, shirt, today}/Vs indicates the way in which the selection unfolds subject to new assignments of intensities beyond the first suggested one. As you select the tie, your interviewer selects the exact same one, the bouncer of the club stubs her toe getting out of bed and your lover reviews how they got caught with someone so drab he can only dress in shades of grey with ill-chosen punctuations of turquoise. In the formal definition of your selection, the sign is always accompanied by a revaluation that stirs up its unfolding diagrams.

As much as examples based on choices can capture the arbitrary and unstable nature of selection, they are also risky because they can reinforce a misunderstanding due to the leap we tend to make from choice to intention. By definition, there is no intentionality or subject in the sign. S{a, b, c}/Vs requires a differentiation of a, b and c from other things but does not indicate any requirement for a subject of an intending, in the intention to select or in the aim for the selection. To make out or deduce such a requirement is to fall back on a metaphysics of subjects, actions and intentions as an unnecessary presupposition for the process definition of the sign, for instance by stating that every selection depends on free human intervention and imagination.

Here is a non-intentional example. As you stare into your cupboard, a dark cloud passes by and changes the shades of the clothes. This is a new sign that includes the former one: Sdc{S{turquoise, shirt, today}/Vs, dc}/Vsd, or in more simple notation {{turquoise, shirt, today}, dark cloud}. There is a new set which takes the shirt selection sign with a change in lighting 'dc' which was not intentional. The cloud selection does not require an intention of any sort and, again by definition, it can perfectly well include signs which appear intentional. Why only appear? Because the selection is defined as unconditioned even when it includes human subjects. This does not mean that such intentional acts are denied or impossible. They either belong to a different realm of stipulations over signs, in the same way that the science of cloud formations belongs to a different realm, or they belong in the sign such that choice becomes another element drawn out by the selection {choice by subject x, b, c}.

It could be objected that the problem is not whether signs can include intentional acts and non-intentional elements. By definition they can include such non-intentional things. The real problem is that any set has to be selected by a human subject, for instance in the way I choose a cloud element to go with the moment when a hand pulled out a turquoise shirt today. The answer is the same. There is no requirement for a subject in the definition of the selection of the set that determines a sign. We can discuss a given sign as intended or not and we can stipulate that all signs should be intentional or meaningful to humans, but there is no need for them in defining a sign as an undetermined set.

The non-intentional example raises new problems in the way it introduces the inclusion of signs in other signs, something always possible given the definition of signs as including any element and hence obviously other signs. This raises questions about the definition of the sign as selection of elements and paradoxes such as Russell's paradox. It is also problematic in the way it makes the proliferation of signs more apparent. I will discuss the sign as involving paradoxes when I study paradox in Deleuze's philosophy of the sign in Chapter 7. Problems of proliferation will be discussed in the next section.

WHAT IS A SIGN? WORLDS AND REALMS

In setting out the process philosophy of the sign, I have used a language of selections and worlds, and a language of stipulated realms and patterns for signs. Each sign is a selection over all things. As such it is a perspective over a world: a selection within it. It is also, though, selected in other worlds: selected by other signs. These relations are therefore, first, those of the sign as a singular take on a world that is in principle limitless, $S\{a, b, c\}$ over all things. This sign is always in a process of change in relation to its own unfolding, $S\{a, b, c\}/Vs$. Second, there are stipulations over a sign which impose rules and laws for signs, which treat them as a coded or lawful realm. There is always a gap between the two manners of thinking about the sign, since realms necessarily contradict the unconditioned nature of the selection and the open, intensive, revaluations along suites of diagrams.

For instance, in discussing Uexküll, and Baptiste and Dupré, in Chapters 3 and 4, a distinction was drawn between Uexküll's limitation of the sign for different animals and the process definition. There was also a distinction between Baptiste and Dupré's inclusion of the sign under conceptions of empirical differences and the demands of naturalism, and the lack of such prior assumptions for the sign as process. The scientists and philosophers of biology define a realm for signs, with a dependence on limited plans in the case of Uexküll, or supervenience on empirical differences in the case of Dupré. There is nothing wrong with this dependence on its own terms. My concern is with the contrasts that can be drawn with a more open definition of the sign.

The limited number of signs for any animal and evolution in discrete leaps mediated through external ideal patterns in Uexküll and Ruyer could be an effective explanatory model. Difficulties arise when such models are taken as the basis for wider conclusions about the nature of signs because this

eliminates their full critical and creative potential as process signs. The point of a realm is that even if it defines a sign as a perspective on the whole world, and thereby comes very close to the process definition, it also imposes a restriction on the sign as selection, containing its scope by stipulating which inclusions of signs by other signs are valid, empirically confirmed or possible.

The advantage of the process philosophy of signs over realms is that it allows for an approach where any sign can be entertained so long as it is not limited or given a fixed or stable set of relations for unfolding. The consequence of this is a definition of the world of the sign as a relational perspective on all things, solely determined by the singular aspect of the selection and by a suite of suggested intensive diagrams. This definition appears to come with a deep disadvantage, since signs are usually thought of as involved in discrete chains, such as linguistic combinations of signs that are in some way external to one another, for example, table + chair + room. Can the process philosophy of signs offer a viable alternative to accounts of systems of independent signs?

Rules, laws and realms are very good at handling combinations of independent signs because they give shape to them by stipulating which ones are allowed and which ones aren't, or which are empirically verified and which are not. I have taken advantage of this in order to draw a distinction between the sign as process and signs as used in science or logic. However, what if the stipulation for patterns is necessary for any sign? What if signs must be considered as external to one another and as dependent on chains for their existence? Might it be that the sign makes no sense when defined as a selection against a limitless substratum and as perspective over the all worlds?

The sign has an abstract role in philosophy, as a term for understanding kinds of reality and relation. It also has a practical role, as a way of understanding how communication works. In the first role, the problems of the sign are metaphysical; in the second they are semiological. The two connect since metaphysical claims can underpin theories in semiology. Equally, though, semiology can be presented as a theory about explanation, understanding and communication which does not require metaphysical underpinnings, either as an empirical approach to social and natural communication, or as theoretical and empirical theory construction about a special field: the field of signs. Given that the motivation behind this process philosophy is to give a metaphysical definition of the sign in order to allow for new ways of studying signs in practical circumstances, I am interested in both approaches.

In metaphysics, viewed as abstract speculation about the nature of reality, the main problems concern the plausibility of signs which encompass the whole of the world. If a sign is the whole of the world under the perspective of a selection and revaluation, how can it communicate with other signs which are the whole the world under a different perspective? If the sign is without limit, how can this continuity have an identity allowing us to make sense of it, since it seems that any grasp of the sign would have to cut into this continuity? If signs are selections on the whole of the world, and they are also selections of each other, won't this generate paradoxes where we either have an infinity of signs and perspectives, with no way of reducing it to some kind of order where we can speak of this world or one world, or we have rules for the inclusion of signs by each other which contradict the formal definition of the sign as unconditioned?

In semiology, viewed as a practical theory and handling of signs, the problem is that the process theory of the sign seems weak as an empirically determined and practical approach to signs. It also seems unpromising as a way to reduce and order the number and complexity of signs. If we define the sign as a limited and fixed relation we have a more straightforward methodology for the analysis of everything from words, to fashion, to advertising. All we need to do is look for the features identified in the relations and we have a repeatable structure for their study and critique. Thus traditional semiology and structuralism have offered many theories which allow statements such as 'Red signifies anger' or 'There is an analogy between colours and temperatures according to the following structure'. Structuralism and semiology have become common currency in cultural discourse and yet they have also fallen away as central approaches to social and cultural phenomena, perhaps due to the increasing influence of other natural and social sciences. One of the motivations for the process philosophy of the sign is to change the frame and justification for semiology in order to suggest a renewal of the subject as radical approach to signs.

I will leave the metaphysics the sign to the seventh chapter where it will be discussed in relation to Deleuze and Guattari and Whitehead. Until then, provisional answers can be given to the questions raised about the plausibility of the sign based on its formal definition. Though the sign is without limits, it is not without determination because each sign is determined by its selecting set, and by its unfolding according to a diagram of intensive relations and its revaluations over this unfolding. It is also given a critical context by the realms seeking to control the sign.

The selection allows for a limited description of the selection $S\{a, b, c\}$ with an ongoing and diagrammatic description of the unfolding and experimental hypotheses around further diagrams $S\{a, b, c\}/Vs$. Taken together, these are the basis for the description of a sign: selected set and suite of diagrams. These in turn must be completed by descriptions of the realms and rules or laws which stipulate limited relations within the sign, as well as limitations in its relation to other signs. Finally, these stipulations should be set alongside a critical and creative evaluation of the gaps opened up by the sign as selection. The sign is therefore an internal description and experimentation; an external description of claims on the sign; and a critical and creative response to those claims.

For example, a sign and world are selected in a generous welcome $S\{\text{handshake, gift}\}$ which can be traced in a series of changing relations (increases in value for the gift, increases in mutual debt, increases in friendship, decreases in distrust, say). Equally, though we need to see how these strengthening relations are threatened by new valuations with experimental questions (How and why are these relations determined by the set breaking down?). Alongside these internal relations there will also be rules and laws stipulating how the sign might combine and unfold, for instance customs about gifts or social rules about corruption and graft. These can be in a critical and creative relation to a selected sign, for example in gifts attempting to reveal the role of corruption or bypass laws against it.

Or to give a non-human example, when a landslide blocks a stream thus giving rise to the sign $S\{\text{landslide, blocked stream}\}$, we can begin to trace changing relations in other things in their relation to the blockage – flooding, changes in plants, and so on – as well as trace hypothetical variations which break an emerging unfolding. Note how this is not limited by a scientific selection of salient facts, or a

description of the unfolding from those facts according to causal or probabilistic models. Such a scientific model involves the stipulation of rules for a realm, rather than the description of a sign. The selection is unconditioned in the sign and the tracks unfolding in an experimental and speculative manner in terms of the variations in the intensity of relations.

James Williams, August 2015