Nature, Consciousness and Feeling: The Therapeutic Potential of Process Philosophy

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Abstract

The past few decades have witnessed a rapid expansion in Western culture of various self-help therapies and techniques, often underpinned by the outdated assumptions of mechanistic, reductionist science or lacking a theoretical base altogether. This thesis develops a theory of human experience and understanding which can reveal the possibilities for deeply altering experience. While the theory of metaphor developed by George Lakoff and Mark Johnson is taken as a point of departure for this project, the inability of this theory to deal with deeper levels of experience is used to demonstrate the need to engage with questions of ontology. Conceptualising the co-influence of experience and understanding can only be achieved, it is argued, by a paradigm shift to process philosophy, understood historically as the effort to move beyond the subject/object division. Based on the dialectical understanding of process and relation, and the related conception of causal principles involving inner and outer aspects, augmented by ideas from hierarchy theory and biosemiotics, process metaphysics is used to develop a view of consciousness as emerging from preconscious natural processes. On this basis the self is viewed as a semi-autonomous system in relation to both individual history and external circumstances, with consciousness deemed a unique process, the only process that each person is completely within. A discussion of action drawing on Suzanne Langer’s analysis of forms of animal action, Pierre Bourdieu’s concept of habitus and Eliot Chapple’s view of the uniqueness of individual rhythms of engagement, provides the basis for a hierarchical theory of consciousness that places the neuroscientific theories of Joseph LeDoux and Antonio Damasio in the context of process metaphysics. This provides the means to clarify Martha Nussbaum’s work on the development of emotion. These theories support a view of feeling as the repetition of patterns of interaction in relation to current circumstances, which, it is argued, provides the most basic sense of the self in the world. It is suggested that actual situations the self encounters can be changed by altering beliefs about the causes of events, based on the process ontology presented herein, and observing how feeling changes in the context of this altered understanding. The possibility for changing experience is summarised in a basic set of principles that can then be used to evaluate the efficacy of a broad spectrum of self-help therapies and techniques.
Acknowledgements

I began this PhD with no knowledge whatsoever of process philosophy, knowing only that I wanted to find a way to understand how feeling, that most immediate yet somehow intangible aspect of human life relates not only to the physical body but to events that occur more obviously outside of ourselves. I found process philosophy, as both speculative and systematic thought, to provide the means for comprehending this relation more deeply than I would have thought possible. It has been my good fortune to work with Arran Gare on this project. I offer my sincere thanks to Arran for sharing his knowledge and insight with me, and helping me to make a radical shift in my thinking. I thank Arran for his guidance and direction, but also for allowing me the space to think these new ideas through for myself and to develop them in my own way.

I would also like to thank Paul Healy for his reading of the thesis and his insightful comments, along with Michael Dix for his considered input in the early stages of writing this thesis. Thankyou also to Allan Whitfield for his reading of and continued interest in my ideas.

Many of the ideas expressed in this thesis were developed in relation to a deeply personal process of change experienced over the past five years, most particularly through the use of a process called Radical Forgiveness, underpinned, for me, by the process of Reiki healing, with the guidance and support of Tricia Statham. This process may be described as one of releasing patterns from the past and observing the changes this brings both inside and outside the self. It is difficult, perhaps impossible, for me to describe how evident and tangible this kind of change is, particularly in terms of outer circumstances, in a way that simply cannot be accounted for by speaking about it only in terms of the behavioural or psychological. Ultimately this thesis is my attempt to formulate a world view that can accommodate what I have experienced and observed. I offer my sincere gratitude and heartfelt thanks to Tricia for assisting me in this process of change, for her wisdom, compassion and utmost integrity. Her presence in my life has given me the safety and confidence to explore extreme and difficult feelings, knowing these experiences would always provide healing. The reliability and profundity of this experience of change has formulated my beliefs as much as the intellectual endeavour of developing this thesis. I have been truly blessed to develop these ideas in both theory and practice, to find in my own heart that change of this kind always moves in the direction of openness, connectedness and love.

Finally, thanks to my family and friends simply for being themselves and being in my life. Thankyou everyone for your patience, interest and support over the past five years.
DECLARATION

I declare that this thesis:

i. contains no material which has been accepted for the award to the candidate of any other degree, except where reference is made in the text of the thesis;

ii. to the best of my knowledge, contains no material previously published or written by another person, except where due reference is made in the text of this thesis; and

iii. where the work is based on joint research or publications, discloses the relative contribution of the respective workers or authors.

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Introduction

At their best, philosophers should reflect on aspects of their culture, expose the most basic assumptions upon which they are based, identify those that are defective and offer alternatives. Nietzsche’s metaphor of philosophers as physicians of culture encapsulates this.\(^1\) The metaphor of the physician is a useful one, as one who identifies symptoms, describes an underlying condition and proposes a remedy.

The symptom taken as the point of departure for this thesis is the growth and expansion of what Steve Salerno terms the Self-Help and Actualization Movement, a broad range of ideas and practices that have emerged in Western culture, particularly in the United States, largely towards the end of the twentieth century. Salerno claims that

Self-help is everywhere and yet it’s nowhere, seldom recognized for what it is: a contributing factor (at a minimum) to many of the problems now plaguing our society…The alleged philosophies at the core of the movement have bled over into virtually every area of American social conduct and day-to-day living: the home, the workplace, the educational system, the mating dance, and elsewhere.\(^2\)

Salerno provides a scathing review of the growth of this movement and the individuals involved with it, calling it “a story that represents the ultimate marriage of money and aspiration.”\(^3\) Indeed, by 2005, the year of publication of *SHAM*, the business of “self-improvement and all its forms” was valued at $8.56 billion, showing an increase of almost three billion dollars since 2000.\(^4\) The *New York Times Book Review* has included a category for best-sellers in this area, “Advice Books”, since

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\(^3\) Ibid., p 2.
\(^4\) Ibid., p 8.
Salerno’s book is an overview of the movement, including major ‘gurus’, and more minor inspirational speakers, including sportspeople who share their ‘winning’ mental attitude with the corporate world, and ex-prisoners who offer stories of redemption. He also discusses the influx of self-help into general areas such as health care and education. Salerno’s main point is relatively simple, that there are no measures of the success of self-help, into which Americans particularly invest so much time and money, and that its huge growth as an industry rather suggests a lack of efficacy, as does the level of use of psychiatric and mood enhancing medication within American culture.

The movement is described as constituted of two ‘camps’, the basically opposing points of view of Victimisation, “which sells the idea that you are not responsible for what you do”, and Empowerment, “the idea that you are fully responsible for all you do, good and bad.” The perspective of victimisation relates to the basic premise that ‘we are all diseased’, formed by forces such as childhood trauma, all out of our control, whilst the perspective of empowerment creates unrealistic expectations about potential. Neither perspective, Salerno claims, is useful. In a sense, both perspectives lead to helplessness, as when people fail to reach goals set for themselves lodged in their belief in their own power, they are taught to see the cause of their failure as within themselves. Even so, Salerno’s analysis of the effects of the SHAM movement at the level of society draws largely on the stance of victimisation, which he points out as related to the excessive use of litigation in the United States, along with a culture of loyalty to politicians which, once engaged, appears to preclude any kind of subtle and complex consideration of their values, behaviour and policies.

Salerno’s blurb describes him as a “feature writer, essayist and investigative reporter”, and his book is more descriptive than analytical, yet he provides a detailed overview that, with statistics and snippets of interviews supporting his claims, serves as a

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5 Ibid., p 9.
reasonably thorough report on this particular aspect of Western culture, epitomised in
American culture, but generalisable at least to some extent outside of the United
States. Yet it is not Salerno’s project to consider the cultural preconditions of the
arising of the self-help and actualisation movement; he identifies a range of
symptoms, but not an underlying condition. Indeed there is some irony in his
ridiculing of society’s perception of itself as diseased. At the level of the individual, in
the sense of how individuals perceive themselves and their own life, this is a
reasonable perspective, yet at the same time his explanation of the pervasiveness of
helplessness and victimisation in many areas of day-to-day life does in fact suggest
disease, a chronic condition. The lack of analysis of underlying causes developed in
the history of Western culture results in an ambivalent stance towards those practicing
and profiting from this movement and despite his refrain from ultimately blaming
individuals, his cynicism, even if justified, suggests otherwise. Thus, he suggests that
it is in the interest of the self-styled gurus that their followers’ lives not improve,
preserving their own markets. Yet rather than this strange circularity of self-help
techniques pointing to malign motives in it developers, it rather suggests the measure
by which people may judge their leaders; the self-styled guru emanates confidence
and fulfilment because he collects wealth and prestige, and it is this alone that
convinces people of his effectiveness. Wealth and power are synonymous, and
wealthy individuals are so by their own doing alone, returning again to the basis of
empowerment, which, placing all power in the individual, also renders that individual
helpless when their efforts come to nothing. There is indeed something deeply amiss
with the value system underpinning this perspective, but such values were surely not
created by those now profiting. One of Salerno’s most telling points is that “The
mainstreaming of SHAM dogma did not occur by design”, yet he finds its influence in
education, health care, politics and legal practice. The emergence of a general
perspective points towards something more deeply entrenched in contemporary
Western culture.

The possibility, at least in part, for the development of the self-help and actualisation
movement was provided by the development of psychology, the language and

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7 Salerno criticises, in particular, the Recovery movement, instituted in 1935 with Alcoholics
Anonymous, for its ‘disease model’, which he claims encourages “ordinary people with ordinary lives
to conceive of themselves as victims of some lifelong ailment that, even during the best of times, lurks
just beneath the surface, waiting to undo them.” (SHAM, p 141)
concepts of which have filtered into everyday usage. Indeed, ‘popular psychology’ is somewhat synonymous with the term self-help, and psychology has its own branch committed to using the techniques and insight gained from psychology to promote the possibility for psychology as a tool for positive change in people’s lives, aptly termed positive psychology. Before discussing positive psychology, it is worth understanding the general orientation of psychology towards the place of the individual self in culture and the broader environment.

Possibly the single greatest contribution of psychological concepts to our current mode of understanding ourselves was made by psychoanalysis, beginning with Freud. Philip Rieff describes psychoanalysis as operating by way of the analytic attitude, itself made possible by the environment of science and its ideal of impartial observation. Thus, “Psychological man takes on the attitude of a scientist, with himself alone as the ultimate object of his science.” The context of the development of such an attitude towards the self must also be seen in terms of the values espoused in the culture of the time. The rise of the belief in science and corresponding decline in religion as a guiding force for culture marked a significant change in the perception of value as inherently related to reality. Thus, Rieff described two types of theory, one that “continued unbroken until the time of Francis Bacon”, and the other that “arose both as a response to the death of the gods and also as a weapon for killing off those surviving, somehow, in our moral unconscious and cultural conscience”. The first type of theory, “this first tradition of our culture”, grew from the inseparability of value and truth. Thus, “Theoretical knowledge is therefore of the good; the ideal is the most real”, and the highest level of knowledge was faith. The second type of theory that followed, however, looked not for the order of things, to which we should conform, but rather to the ways that we might transform reality.

The transformative cast of theorizing, unlike the conformative cast, is silent about ultimate ends. In the absence of news about a stable and governing order

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10 Ibid., p 86.
11 Ibid.
anywhere, theory becomes actively concerned with mitigating the daily miseries of living rather than with a therapy of commitment to some healing doctrine of the universe. In fact, the universe is neither accepted nor rejected; it is merely there for our use. In the second tradition, theory at its highest reach is not faith but, rather, power.12

The scientific revolution grew from efforts to understand nature through reductionist methods and mechanistic, linear notions of cause and effect, ultimately to render nature manipulable for our human ends. The place of humanity in this orientation to the world is directly at odds with the “classical character ideals [that] were all personifications of a release from a multitude of desires.”13 and the cultural correlate of the scientific world view could only be based on human fulfilment. “The dialectic of perfection, based on a deprivational mode, is being succeeded by a dialectic of fulfilment, based on the appetitive mode.”14 No value beyond the satisfaction of human needs and desires could exist in any meaningful sense. “The analytic attitude has discovered no natural harmony of goals, no hierarchy of value inscribed upon the universe.”15 Thus, the individualism on which Western culture continues to be based, in all its forms, particularly economic, finds its philosophical origins not only in the reductionist view of atomism, but in the complete separation of meaning or knowledge and value.

Rieff’s distinction between positive and negative communities is important. A culture in which knowledge and value are not separable provides for the genesis of positive communities, which are transformative of “all personal relations by subordinating them to agreed communal purposes”, in their “guarantee of some kind of salvation of self”.16 Yet the analytic attitude only provides the possibility for negative community; it is informative rather than transformative. Efforts aimed at transformation reside only at the level of the individual, and thus the goal of science is also the goal of psychoanalysis; “the aim of psychoanalysis is the aim of science-power; in this case a

12 Ibid.
13 Ibid., p 49.
14 Ibid., p 49-50.
15 Ibid., p 51.
16 Ibid., p 73.
transformative technology of the inner life.”\textsuperscript{17} Thus, Rieff sees the moral revolution, the replacement of the organisation of the social order through “primary group moral passion”\textsuperscript{18} with a non-moral culture, as completely embodied in the scientific endeavour.\textsuperscript{19} Psychoanalysis, and its foray into popular culture illuminates in particular the link between an inward focus of the individual and the generation of wealth, a perspective which is simply of its time. Rieff pinpointed the goal of individual transformation before the current boom of the self-help and actualisation movement. “The reformer only asks for more of everything – more goods, more housing, more leisure; in short, more life.”\textsuperscript{20} The psychological concept of the self, its meaning and possibilities, may be seen as a completely natural outgrowth of the tradition of reductionist, mechanistic science, and the result is clear. “Psychological man is born to be pleased.”\textsuperscript{21}

It cannot, and indeed should not, be denied that the ability of human beings to transform the natural world in accordance with our wishes is compelling and at least partially effective, or that such a broad field as psychology provides insight into human life. Yet if psychology was made possible by the world view and method of science and the ideology of science pervades Western culture as an overarching guide for the direction of the development of humanity, and we can identify serious problems in this culture, then we must ask whether the method of science and the values it upholds has overextended itself. Whilst science aims to describe the world in neutral terms and finds no inherent value in the universe, it nonetheless upholds an ideology as the way forward for humanity, as a directive for action that seeks power over the natural world as the mode for bettering human life. The more control we have over the natural world, the greater the possibilities for humanity, and the extension of this into psychology, by way of the theorising of psychoanalysis in particular, once we take ourselves as objects of science, is the prescription that the more we are able to control ourselves, the greater our possibility for individual fulfilment. Individualism leads naturally to this perception of human beings; the individual is the locus of agency and our efforts to manipulate nature to our own ends

\textsuperscript{17} Ibid., p 93.
\textsuperscript{18} Ibid., p 243.
\textsuperscript{19} Ibid., p 256.
\textsuperscript{20} Ibid., p 243.
\textsuperscript{21} Ibid., p 22.
must be limited only by the ways we ourselves are limited. The mechanistic and linear concepts of cause and effect used to understand and manipulate nature are applied to human actions as causes.

Even though positive psychology makes more modest and reasonable claims than the popular forms of self-help, the underlying perception of causes is similar in both. Martin E.P. Seligman, a founder of positive psychology, clearly states, “I see events as successes or failures of personal control.”22 His research began with defining the concept of learned helplessness, following observations of animals and later people, which describes a state of inaction related to the belief in the complete ineffectualness of one’s actions, learnt in the repetition of situations one cannot control. As this state is a matter of belief in one’s ability to have an effect, rather than one’s actual ability, Seligman’s research focuses on the ways people explain events to themselves, exhibiting either optimism or pessimism. “An optimistic explanatory style stops helplessness, whereas a pessimistic explanatory style spreads helplessness.”23

The three parameters that define explanatory style are permanence, pervasiveness and personalisation. The first two of these are straightforward and reasonable; the more optimistic person sees setbacks as temporary and specific rather than permanent and universal, highlighting simply that we act according to what we believe is possible to change. The third parameter is more problematic, relating to whether people tend to attribute the causes of setbacks or difficulties internally or externally. Seligman views this parameter as the least important of the three. “Personalization is the easiest dimension to overrate. It controls only how you feel about yourself, but pervasiveness and permanence – the more important dimensions – control what you do: how long you are helpless and across how many situations.”24 Yet whilst the first two parameters of permanence and pervasiveness place limits on the reach of a particular event, they refer to outcomes of an event. They relate to perceptions about causes in the sense of the scope of an event and the ability of an individual to act subsequently, but not more specifically to the cause of the setback. Personalisation is the explanation of cause, essentially attributing cause to oneself or something outside.

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23 Ibid., p 16.
24 Ibid., p 50.
oneself, usually another person. Thus, whilst such attribution of cause might affect ‘how you feel about yourself’ and thereby play a role in your perception of your own possibilities and capabilities, as a causal explanation, personalisation refers to how something happened in the first place, and is therefore a statement about a person’s position in the world that refers both to the self and to the world.

When bad things happen, we can blame ourselves (internalize) or we can blame other people or circumstances (externalize). People who blame themselves when they fail have low self-esteem as a consequence. They think they are worthless, talentless and unlovable. People who blame external events do not lose self-esteem when bad events strike. On the whole, they like themselves better than people who blame themselves do.25

The obverse applies to the explanation of positive events.

The optimistic style of explaining good events is the opposite of that used for bad events: It is internal rather than external. People who believe they cause good things tend to like themselves better than people who believe good things come from other people or circumstances.26

Seligman is aware of the problem this mode of understanding causes creates, as the optimal way to explain the causes of events would appear to be to take full credit for those we consider positive and no responsibility for those we consider negative. He even laments the role of aspects of psychology in discouraging personal responsibility; “Certain psychological doctrines have damaged our society by helping people to erode personal responsibility.”27 Seligman is clear that he does not wish to further this trend, refusing to advocate that people “change their beliefs from internal to external wholesale.”28 The reason he gives for encouraging responsibility for one’s failures is that this encourages people to change. Therefore the optimal condition for change must be to see a cause as internal and temporary, which is his reason for prioritising the dimension of permanent/temporary in his analysis. In the instance of

25 Ibid., p 49.
26 Ibid., p 50.
27 Ibid., p 52.
28 Ibid.
depression, however, which he maintains usually involves excessive internalisation, taking *too much responsibility*, externalisation should be encouraged, along with seeing events as temporary and specific.

The most notable aspect of these views, in the context of the present discussion is that an optimistic explanatory style is linked with a better life, conveyed in such terms as better success at work and better health, and therefore change in a person’s life is presented through strategies to encourage such an explanatory style. We choose our perception of events based upon the internal effect of that perception, say hope or despair, which will then lead to corresponding actions. A more recent overview of research into explanatory style explicitly makes the point that optimism relates not to expectations about events themselves, but “about the future contingency between events good or bad and responses”. Thus, Christopher Peterson and Tracy Steen state that “As we see it, the most typical and robust mechanism linking explanatory style and outcomes entails behaviour.”

Seligman’s research has been both broadened and refined since the publication of *Learned Optimism*, yet accounting for the broader context for choices amongst optimistic or pessimistic perspectives, such as understanding actual dynamics of interaction or actual causes for events remains difficult. This may be seen as deeply related to the limited causal explanations possible in the mechanistic, reductionist view of science. In line with the linear view of cause and effect, our setbacks are either caused by us or caused by someone else or some circumstance beyond our control; in a fundamental way, we can choose between seeing ourselves as either controlled or in control. Positive psychology has been developed and extended to include higher level social and cultural processes and their influence on well-being, yet this may be seen to be in uneasy relationship with the basic stance of psychology as impartially observing the individual, with the only guide for and goal of observation as the bettering of the individual life. For instance, Seligman advocates choosing at times to take individual responsibility not with reference to any inherent

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31 This field of positive psychology is termed Community Psychology. William C Compton, *An Introduction to Positive Psychology*, (Belmont: Wadsworth, 2005), p 229-233.
broader reason or value for doing so, but because it is more likely to lead to action that in turn makes us feel better.

Even though Seligman does not present his views in such a simplified form, assumptions about causality may be seen as embedded in his work. This leads to some degree of inconsistency and ambivalence in his claims, most apparent in his discussion of depression. He traces the increase in depression in the United States through the twentieth century, citing large scale studies that demonstrate at least a tenfold increase in depression amongst the general population during this time. When viewing depression and his own research regarding depression and explanatory style, Seligman finds a major causal role for pessimism; effectively, although he sees it as one of a number of possible causes, pessimism causes depression. It does not cause the ‘bad events’ but the way we respond to them, determining whether short-term setbacks and discouragement become long-term depressive episodes. He also draws on the success of cognitive therapy as a treatment for depression, which originated with Aaron Beck and Albert Ellis, who “both argued that what we consciously think is what mainly determines how we feel”,32 and devised a treatment based on identifying and altering our conscious descriptions of situations.

Yet Seligman, in the final chapter of Learned Optimism analyses depression through a similar cultural analysis as Rieff, finding it related to the loss of common life in favour of the self. This is clearly related to individualism.

For one thing, a society that exalts the individual to the extent ours now does will be riddled with depression. And as it becomes apparent that individualism produces a tenfold increase in depression, individualism will become a less appealing creed to live by.33

Individualism severely limits the meaning and comfort that may be found in belonging to and abiding by broader social groups, familial, national and religious.

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32 Martin E.P. Seligman, Learned Optimism, p 89.
33 Ibid., p 287.
The larger the entity you can attach yourself to, the more meaning you can derive. To the extent that it is now difficult for young people to take seriously their relationship to God, to care about their duties to the country, or to be part of a large and abiding family, meaning in life is hard to find.  

Depression then, according to this analysis, is caused by something much broader than the pessimistic, conscious thoughts of the individual; we might wonder about the efficacy of altering conscious descriptions to alleviate it. This is not to discount the evidence presented by Seligman for such alleviation by, for instance, cognitive therapy, or the worth of an improved life for those individuals who do benefit from such therapy, but rather to suggest that deeper analysis is required. Seligman makes the somewhat astonishing statement, given the role of optimism in his views, that pessimists are usually more accurate and realistic in their perceptions of situations, suggesting something about the actual broader reality in which the individual lives and making optimism, in some cases, seem rather delusional. Ed Diener, Richard Lucas & Shigehiro Oishi summarise a common finding in research related to subjective well-being: “It appears that the way people perceive the world is much more important to happiness than objective circumstances.” Whilst this statement encourages a more optimistic view of life at the level of the individual, it might also support the rather strange notion that what matters is how we feel, not what happens, strange not because we should discount our own well-being, but that it appears rather disconnected from anything outside ourselves, reinforcing once again the underlying assumptions of individualism and reductionism.

Seligman’s overall suggested remedy for depression is a ‘flexible optimism’ along with deliberate efforts to reengage with broader society such as through acts of service or donations to those in need. Again, there is nothing amiss with these suggestions, but they do not get to the heart of the problem, which, as intimated in Seligman’s own analysis, is complex and multi-layered. Even though the problems with individualism are briefly mentioned, following Rieff’s analysis, individualism is

34 Ibid.
the natural outgrowth of the scientific world view, both in the ontology of reductionism and in the absence of inherent meaning or value in a materialist reality, and these views made psychology possible. Even though Seligman ridicules psychoanalysis, the basic stance towards the self continues right through psychology, even if at times only implicitly. Furthermore, we cannot both deride individualism and use theories and methods that continue to espouse the scientific world view, however implicitly, to propose a mode of going forward. The remedy should be a genuine alternative.

Seligman tempers his claims with reference to broader social changes, by noting that pessimism and the caution that accompanies it is sometimes called for and by advocating a measured “non-negative thinking” rather than unbridled optimism. Yet without deeply questioning the view of reality and attendant values on which contemporary American culture, or Western culture in general is based, the choices we might make to balance individual needs and desires and individual responsibility must still be considered within the general goal of individual fulfilment. The more extreme views within the self-help and actualisation movement may be seen as an extension of Seligman’s views regarding optimism and pessimism, more completely fitted to the cultural climate of individualism and the materialist, scientific view of reality. When seen in relation to the view of the self as either controlled or in control, in only a simple, linear causal relation with everything outside the self, then the two perspectives identified by Salerno as pervading the self-help and actualisation movement simply become the extremes of the view espoused by positive psychology. We blame external forces, even if internalised for instance in childhood, for those aspects of life that we do not like or that do not serve us, rendering ourselves victims, and see ourselves as the sole cause of those we do like and that do serve us, rendering us omnipotent. If we understand optimism and pessimism to work in the way Seligman suggests then these extremes, in the context of a value-free science, are the logical endpoint. This renders somewhat ironic the major criticism that Salerno makes of the self-help and actualisation movement, the lack of credible, scientific research to support claims of effectiveness. Indeed, Peterson and Steen note that the reliance on empirical research is the distinguishing factor between positive psychology and “the

37 Ibid., p 15.
positive thinking movement”. If scientific research were to demonstrate the lack of effectiveness of the extremes of ‘positive thinking’ or ‘victimisation’ as perspectives on the self, then this would also say something about science as the very theory on which these views may be seen to be fundamentally based.

The discussion thus far is intended serve as an example to illustrate that the members of Western societies are seeking a greater sense of meaning and personal fulfilment, but that their efforts in this direction remain within the overarching world view of traditional science, a materialist, reductionist and mechanistic ontology. The initial symptom identified was the self-help and actualisation movement, as detailed by Salerno, yet this symptom may also be interpreted as efforts to remedy a deeper problem, well described by Seligman; “unprecedented psychological misery in a nation with unprecedented prosperity and material well-being”. The recourse of both Salerno and Seligman to science suggests an underlying circularity of thinking. Psychology as a field of understanding should not be dismissed outright, yet its recourse to science remains problematic. Positive psychology in particular makes greater foray into ‘subjective’ phenomena, but the ‘scientific’ aspect of this can only suggest links between phenomena, such as health and happiness, by describing statistical probabilities in large populations. This suggests correlations of situations that may support correlations of aspects of individual experience, implying some causal relationship yet not really describing or accounting for causes.

Ambivalence in the relationship between positive psychology and the scientific method is underemphasised. For instance, in William Compton’s Introduction to Positive Psychology, science is both lauded as a basis that legitimates the field, and

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38 Christopher Peterson & Tracy A Steen, “Optimistic Explanatory Style”, p 252.
39 At this point the distinction between scientism, as promoting traditional science as the ultimate way of understanding the world, and science itself which is characterised by radical questioning of received assumptions, needs to be made. Even though it may be said that science generally continues to operate within a mechanistic and reductionist ontology, and therefore that mainstream science upholds this ontology as the ultimate mode of understanding, it is nonetheless true that many of the particular sciences have moved beyond this particular orientation. Nonetheless, it may be reasonably stated that scientism continues to dominate Anglo-American culture, and acts as a bias against the development of other forms of science, both in terms of the progress of scientific research and the definition of scientific problems, but also more broadly in the metaphors that are available for use in scientific interpretation. It is in this sense, as a basic and general mode of understanding the world that mechanistic and reductionist science is invoked as the dominant world-view a number of times in this thesis.
40 Ibid., p 65.
suggested as a factor that limits theorising, particularly with regard to the understanding of causes.\textsuperscript{41} An interesting and innovative concept emerging from positive psychology is that of ‘flow’, developed initially by Mihaly Csikszentmihalyi, describing a state of consciousness in which an individual is completely absorbed in a task, an enjoyable state that those who experience it attempt to continue. The research into and analysis of such a state involves many concepts that extend beyond the theoretical possibilities provided by science, namely those involved with situations of complexity, such as emergent motivation in an open system,\textsuperscript{42} yet without the acknowledgement of this extension; the standards set for experiment and understanding are surpassed but the possibility of a need for a wholly different theory appears largely unnoticed. Jeanne Nakamurra and Csikszentmihalyi even make the broader statement that “In recent years, the model of the individual as a proactive, self-regulating organism interacting with the environment has become increasingly central in psychology.”\textsuperscript{43} If this is indeed the case, then the relationship between such new ideas and the science on which psychology was based must be reconsidered, particularly as simply grafting new ideas onto an existing field underpinned by reductionism and mechanism could surely, at the very least, limit the potential of new approaches.

Rather than denying the success of psychology as an entire field or indeed even assuming that few people benefit from self-help as a popular field, it is important to understand the entire system of thinking underpinning contemporary Western culture and how this system pervades our modes of understanding ourselves individually and collectively. As any new theory must take account of the successes as well as the limitations of mechanistic, reductionist science, so too should the goal of personal fulfilment be seriously considered. Our ability to reflect on ourselves and consider our individual well-being may well have been enhanced in the cultural climate of traditional science and the development of psychology as a mode of observing the self, yet this contemporary Western self need not be rejected as a mere social construction. Evidently, to focus on ourselves in this way is within the realm of human possibility and both Salerno and Seligman admit that the basic intention of so

\textsuperscript{41} William C Compton, \textit{An Introduction to Positive Psychology}, p 247.
\textsuperscript{43} Ibid., p 90.
many people seeking therapy, either within established psychological therapies or the more disparate array of self-help and ‘New Age’ modalities, is simply to feel better in their own lives. The goal of personal fulfilment may not be diametrically opposed to a well functioning society and the current perceived link between wealth and fulfilment is not a necessary one. This is at times intimated in Seligman’s work, and the link between wealth and happiness is largely discounted in recent empirical studies44 but without a theory of the self and its relation to the broader cultural changes, particularly one able to account for causal relations in a new way, the basic assumptions of reductionism and the individualism that follows remain as severe limitations.

Clearly, people are seeking to alter their experience in some way, and indeed, as Seligman suggests, may want to feel less helpless and more empowered by altering their conscious perception or understanding of themselves and their place in the world. This concern with understanding experience may also be described as attempts to understand how we affect and are affected by the world, and attempts to alter understanding tend to fall into either materialist or idealist modes of perceiving reality. Positive psychology maintains its commitment to science and therefore materialism, meaning that altering patterns of thinking is seen to alter our possibilities for action, which can only really be conceptualised as physical acting in the physical world. Feeling, within this framework, is essentially conceptualised as caused by thought. For instance, the altering of thought, conscious modes of describing situations, is seen to alleviate depression, encouraging different forms of action. Depression must be seen as either an internal feeling state, caused by and external to thought, or an overall state of being that involves both thought and feeling. Either way, feeling must be involved in some way that is inherently involved with our ability to act. Yet mechanistic concepts of cause and effect provide no way to begin to account for the possibly complex interrelationships of thought, feeling, action and external circumstances. The result is that human life and functioning is conceived in simplified terms; thought causes feeling and action, and action occurs in the context of myriad other causes or forces outside of the human being, only really conceptualisable in their most basic form as physical forces. Thus, life naturally

involves opportunities and setbacks, but cannot be described any more clearly or deeply than this, and our opportunities for change rest largely in choosing our mode of responding to events that have already occurred, events that can in turn only really be described as controlled by us or attributed to causes outside ourselves.

Forms of self-help that may be characterised as empowerment eventually, in their more extreme forms, uphold idealist views of reality. Thus, the power of positive thinking and the power of the mind is emphasised until the concept of mind reaches its extreme limit. A recent example, *The Secret*, a film and later a book produced by an Australian, Rhonda Byrne, introduces viewers and readers to the ‘law of attraction’, a law that like attracts like and that responds to all thought, in the sense that whatever we think of we attract, from encounters with other people to actual material objects. Thus, such pronouncements are made as “Your thoughts become things!”45, “Your mind is actually shaping the world around you”46 and “Everything in this world began with one thought.”47 Thus, if a person actually alters her conscious thoughts, this will alter the reality that appears outside. Feeling is seen as caused by thought, but the text contains the suggestion of attending to feeling as a way of essentially knowing one’s thoughts, implying unconscious rather than conscious thought. This distinction is never explained, but feeling is taken as the most accurate reflection of thought. Thus, the straightforward idealistic statements are more complex than they initially appear, yet the reader is continuously reassured that this mode of causing reality with the mind is simple and easy. Of course, even in comparison to other popular texts, *The Secret* lacks depth of explanation, but its place as an idealist perspective present in popular culture, presented as hidden knowledge finally brought to the masses makes it worth mentioning, particularly as an illustration that people are prepared to entertain other models of reality in their search for personal fulfilment, suggesting a mistrust or perceived inadequacy of the traditional forms of knowledge.48

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46 Ibid., p 21.
47 Ibid., p 143.
48 Indeed, over half a million copies of the film were reportedly sold in just over six months following its initial release, with no paid advertising, and the book is currently number one on the ‘Hardcover Advice’, section of the New York Times Bestseller List, having already spent sixty-four weeks on this list. Jeffrey Resner, “The Secret of Success”, *Time* online, 28/12/06, retrieved on 08/04/08, [http://www.time.com/time/arts/article/0,8599,1573136,00.html](http://www.time.com/time/arts/article/0,8599,1573136,00.html); “Best Sellers: Hardcover Advice”, *The
The intention of the preceding discussion has been to expose the need for a radical shift in thinking that can underpin new perspectives on the possibilities for altering human experience. Such a shift should deepen our understanding of aspects of human consciousness such as thought and feeling and its relation to our actions and the events that occur in our lives. As has been suggested a number of times, this shift necessitates a completely different world view from the currently dominant mechanistic and reductionist scientific world view. The goal of this thesis, then, is not to develop a therapy as such, or to explore particular therapies, but rather to offer a theory of the self in the world that can help to organise our understanding of existing therapies as well as provide direction for the development of new therapies. It intends to offer a theory that may be applied to thinking about why some therapies within the broad spectrum of self-help, extending from the more mainstream popular and positive psychologies to the more esoteric New Age practices, may be more effective than others.

Thesis Summary

This thesis has two principal aims. The first is the development of a theory of human experience and understanding, and its relationship to the world. Such a theory should highlight how basic assumptions about reality enter into our everyday experience. Furthermore, it should offer a way of moving beyond the choice between positive community based on the deprivational mode, and negative community based on the appetitive mode; the individual should be neither vilified nor exalted above all else, but seen as deeply participating in and connected with the world. Such an altered conception of the individual positioned in the broader world necessitates a fundamental theoretical move beyond the dualism of subject and object, and the overriding theoretical goal of this thesis is to attempt such a move.

The second goal of this thesis is to demonstrate the utility of process philosophy as a means by which to engage with contemporary culture, including not only the cultural

phenomenon of the broadly defined self help movement and the problems with its varying and often inconsistent implicit world-views, but also with philosophy and theory as a product of contemporary Western culture, particularly Anglo-American culture. The preceding discussion has identified the need for a better understanding of human consciousness and its relationship to the world and the following thesis will develop such an understanding through the analysis, critique and development of theories drawn from a number of fields including biology, neuroscience, sociology, psychology and philosophy. Process philosophy is taken as a general approach through which to engage in this analysis and development, and a specific set of categories that can exemplify this approach are offered early in the thesis. Whilst these categories may appear simple, they offer a means of engaging deeply with many complex theories from different fields, exposing problems and allowing steps to be made towards their resolution. Thus, this thesis is better understood as an interdisciplinary application of a process approach than an isolated work of process philosophy. Process philosophy offers a whole new perspective on a multitude of existing theories and this is taken as evidence of its profound potential.

Prior to a more detailed discussion of process philosophy as a tradition and general approach, and the definition of categories for this thesis, however, the thesis opens with a detailed discussion of the work of George Lakoff and Mark Johnson. Their work is relevant for a number of reasons. It is situated within the Anglo-American tradition, and contributes to the fields of epistemology, linguistics and cognitive science whilst also opening the way for more radical conceptual shifts than these fields have hitherto been able to support. Lakoff and Johnson offer concepts that can open and begin to direct the discussion of thought, feeling, action and external circumstances as their theory grapples with the relation between human experience and understanding. It does this through a detailed analysis of metaphor.

Lakoff and Johnson contend that alterations in our conceptual system have the potential to change actual experience. They present a detailed analysis of the way that metaphor structures and organises understanding, such that phenomena or experiences we understand more readily may be used to understand those that are less clear to us. Their analysis is predominantly linguistic, yet they claim that metaphor is central to the entire human conceptual system and not strictly limited to language. Metaphor
makes aspects of our experience or understanding of phenomena more comprehensible by allowing us to use other kinds of experience to understand them, yet in doing so it structures our experience and understanding in a very real way. Lakoff and Johnson claim that metaphor serves to both highlight and hide aspects of phenomena such that a change in metaphor alters not only our understanding, but potentially also our experience. Their analysis of metaphorical understanding is relatively straightforward when the discussion is limited to language, but becomes much more difficult to grasp when applied to experience. Lakoff and Johnson see metaphor as arising from an experiential basis, yet they have difficulty in characterising experience. This difficulty is predominantly due to their wish to avoid positing fundamental experiences, which would make their theory of metaphor appear as a linguistic overlay on something absolute and limit the power of their view that those aspects of understanding and experience that occur metaphorically are no less real than other aspects of our understanding and experience. Yet given their difficulty in speaking about experience, they revert to descriptions such as ‘natural kinds of experience’ without really clarifying their use of the term ‘natural’. They suggest themselves that embodiment should be more deeply considered in relation to experience, and Johnson in particular elaborates upon this in later work, yet in a way that remains limited by its focus on physical interactions with objects.

Thus, Chapter One acknowledges the radical and useful aspects of Lakoff and Johnson’s work in its centralising of metaphor in the generation of experience and understanding, yet argues that the limitations of their theories need to be addressed in a three major ways. The major limitation of their theories is their lack of basis in an ontology that makes the move, which they explicitly invoke, beyond the division of subject and object. Thus, their theory should firstly be placed in a theory of nature, based in an ontology that is able to make this move, which should shed some light on their recourse to describing experience with reference to the natural experiences that can only be considered as arising from repetitive involvement with the world. Secondly, their view of experience as a gestalt from which our concepts emerge implies the emergence of experience from outside of conscious awareness, and thus, any theory of nature should be able to account for the emergence of consciousness from nature, through processes that are not conscious. Finally, it is suggested that feeling should be considered as a way of beginning to speak about those aspects of
our conceptual system that are somehow embodied and a part of our conceptual system, yet not languaged. These three major areas for consideration form the trajectory of this thesis.

Chapter Two begins to address the need for an alternative basic ontology than that provided by mechanistic science and reductionism. Process philosophy is taken to be the most promising approach in this regard and this chapter discusses the need to understand process philosophy as a tradition and its position in relation to modern science, prior to the articulation of basic metaphysical categories in Chapter Three. The difficulty of systematising process philosophy is discussed, along with the problem of its overidentification with the work of Alfred North Whitehead. It is deemed more fruitful to approach the systematisation historically. Hans Jonas’ discussion of the development of dualism, its origins in Platonic philosophy and the emergence of more extreme forms arising as much, if not more, from the discovery of the self in Orphic and then Christian and Gnostic religion, provides the precursor to the discussion of the postdualisms of materialism and idealism. Process philosophy is thus positioned as the attempt to move beyond these extremes, which prioritise either the subject or object. Organising our conception of process philosophy around this intended move is most clearly articulated by Arran Gare, who acknowledges both the achievements of the idealists and the need to take nature and the physical world as the starting point for theorising, and who therefore suggests Schelling as the figurehead for the tradition of process philosophy. Systematising process philosophy with reference to this intended move centralises efforts to understand the emergence of consciousness from nature, and thus also centralises emergence as the concept of causality most relevant to process philosophy. The efficacy and simplicity of identifying process philosophy as a tradition in this way is then further argued with reference to George Lucas’ attempts to detail the tradition of process philosophy. He suggests the identification of various schools within process philosophy, through an analysis that includes historical positioning, but is also organised around the basic premises of differing approaches. It is argued that this approach ultimately overcomplicates the tradition and is unclear about the position of Schelling, offering further support for the views of Gare.
The organisation of process philosophy as a tradition around efforts to move beyond an absolute dualism of subject and object allows for the identification of similar concepts from various process philosophers as encapsulating this intention; the solutions offered by process philosophers tend to be similar. Furthermore, arguing for the identification of the tradition around such an intention facilitates the alignment of various theories upon which this thesis will draw, that carry a similar intention yet are not based explicitly in a process metaphysics. Explicitly relating these theories to the underlying process metaphysics, it is argued, supports the clarification of difficulties within each theory, further supporting the need for a basic ontological shift in theorising. Chapter Three identifies the need for a dynamic style of theorising, relatable to the willingness of process philosophy to engage in basic ontological and metaphysical assumptions without positing absolute foundations. Process philosophy is itself a process, and this is encapsulated in Gare’s discussion of dialectics. Dialectics is thus taken as a form to follow in the practice of theorising, relatable also to the importance of theorising the relation between understanding and experience; theory should be influenced by our actual engagement with the world and should be adjusted according to the observation of its effects.

Prior to the detailing of categories that will underpin this thesis, the importance of maintaining dynamism is highlighted. Process philosophy should not be seen as simply based in an alternative set of categories to the current substantialist categories of materialism, a problem identified in Nicholas Rescher’s overview of process metaphysics. Rather it should attempt a different mode of thinking that is preserved as much as possible in the outlining of categories. Gare’s categories are discussed, and his separation of the Category of the Ultimate and the Categories of Existence is followed. Gare posits activity as the Category of the Ultimate, yet the term ‘change’ is chosen for this thesis to emphasise the inseparability of change and cause. Change is always of the whole, yet also unknowable. Existence, it is argued, depends on differentiation, and this view of existence admits the fundamental paradox of epistemology and ontology, also clearly relatable to dialectics. Thus, differentiation is seen as a perspective on the underlying wholeness of change. The simplest way that differentiation can be understood is through the terms inner aspect and outer aspect, and process and relation, which should be considered sets of concepts in which one
implies the other in a dialectical sense, described as the dialectical movement of
duality.

Causality is a central consideration of this thesis, and the concepts inner aspect / outer
aspect are intended to convey the sense of cause as an identifiable principle of change,
rather than ultimate cause, which is always in terms of the underlying wholeness of
change as cause of itself. The concepts are developed with reference to the work of
David Bohm and his conception of implicate and explicate orders. An attempt is made
to resolve the at times unclear relationship of these orders with the underlying
holomovement, similar to the category of change already posited, along with the
difficulties that arise from his apparent prioritising of the implicate order. Thus, the
implicate and explicate orders are taken as ontologically equal, highlighting their
status as perspectives on change through the terms inner aspect and outer aspect,
which do not rely on the notion of separate orders. Thus, inner aspect and outer aspect
are a way of relating identifiable principles of change to the underlying wholeness of
change, with inner aspect corresponding to process and outer aspect to relation.

Concepts that offer further perspectives on these basic conceptual pairs, order /
disorder, continuity / difference, and actual / potential are then outlined and used to
describe the concepts of time and space. These categories provide the underlying
conceptual organisation for the engagement with all the theories that will be
discussed, assisting in the identification of problems and the suggestions for specific
developments that can contribute to the overall goal of theorising human experience
and understanding in the world, while remaining faithful to a process approach.

Chapter Four discusses hierarchy theory and biosemiotics, important for their non-
reductionist approaches, particularly to biology. It is suggested that these theories may
be aligned with process philosophy by their basic intention of moving beyond the
subject and object, and the centrality of the concept of emergence, and therefore that
the metaphysics presented in Chapter Three can assist in the development and
clarification of their concepts. Hierarchy theory, in particular, offers well-developed
concepts for the discussion of processes, both material and non-material, and
therefore the possibility of theorising the emergence of consciousness from nature.
Valerie Ahl and T.F.H. Allen, two major proponents of hierarchy theory, are clear that
they do not wish to engage in ontological speculation, but it is argued that the process
metaphysics presented in the previous chapter can help to clarify and develop hierarchy theory, particularly the difficulty of characterising dynamic and structure in a single theory, an inherent difficulty of accounting for the place of the observer. Once again, dialectics is considered a mode of approaching and beginning to move beyond such difficulty. Ahl and Allen’s concepts of empirical and definitional hierarchies are discussed along with Stanley Salthe’s scalar and specification hierarchies. All are seen to place too much emphasis on either dynamic or structure, rendering them somewhat static definitions of situations, with the exception of Salthe’s specification hierarchy, which, although it attempts the definitions of stages and development through time, is often somewhat unclear because of this. Thus, the central issue for hierarchy theory is seen to be understanding the interrelation of dynamic and structure, an issue of which Howard Pattee appears to be the most aware.

In keeping with the metaphysical categories outlined in the previous chapter, dynamic is redescribed as process and structure as relation, with the relation between the two described as the inner aspect and outer aspect of differentiation. This perspective is then applied to the discussion of boundaries between levels, to emphasise the notion of boundary as both a relation, in its role as boundary, and as a process in itself, as a discernible level between. The discussion of boundaries implies the observation of integrities, leading to a discussion of the particular kinds of boundaries that facilitate the development of semi-autonomous systems. Semi-autonomy is discussed with reference to Salthe’s views of dissipative systems, a mode of characterising both living and non-living systems. The problems inherent in such characterisation are related back to the fundamental difficulty of speaking about dynamic and structure, or process and relation, which allows for positioning biosemiotics as the natural progression of efforts to resolve such difficulties, occurring in biosemiotics as the centralising of the concept of interpretation. Jesper Hoffmeyer and Claus Emmeche define life by the presence of two codes for interpretation, analog and digital, fundamentally conceptualised with regard to the relation between the organism as analog and the DNA as digital code. The major move they make in the definition of living systems is to posit the centrality of the need for the organism to describe itself to itself, made possible by the presence of these two types of code. This is elaborated upon in Jay Lemke’s work, which arrives at the principle that emergence in the dynamic, scalar hierarchy always also involves reinterpretation; it is always both
dynamic and semiotic. Thus, emergence is always also interpretation between existing levels, and life is defined as the special case of closure that occurs when the vastly different time scales of DNA and dynamic cellular functioning come together. Life may then be seen as the opening inwards between these two scales, within which the continual emergence of new levels between allows for the collecting of individual history. These concepts are used to define the self, as a process that always occurs in double relation, both to external circumstances and to individual history. This concept of the self as semi-autonomous, exhibiting the double relation, is a central concept for the remainder of the thesis. It supports a discussion of consciousness, drawing on the work of Hoffmeyer, that can define consciousness as the inner aspect of the self, in double relation to its own history and present external circumstances. Consciousness is taken to be for each of us the only process that we are completely within, emphasising the uniqueness of each individual consciousness. All else is observation, of the outer aspect, meaning that our understanding of and theorising about the world is always limited, yet no less real because of this. Describing the self in this way allows for focusing on the importance and uniqueness of each individual consciousness, but drawing the concept from the development of hierarchy theory and biosemiotics, as theories also of nature, resists idealist or subjectivist interpretations, and furthermore, provides the ability to infer that all living selves develop an inner aspect, even if one potentially quite different from our own.

Chapter Five explores action as a mode of conceptualising the emergence of consciousness from processes of nature, hypothesising that complex forms of action prefigure the development of human consciousness. The emergence of action is introduced with reference to Jonas’ concepts of tension and distance, which highlight that individuation is also expressible as distance from the world; the increased differentiation of more complex selves requires more complex forms of action to bridge this distance, releasing tension from lower levels. Yet action, it is argued, is observable in the outer aspect and describes a relation, and this should be kept in mind when considering animal action in particular. It should be theorised prior to making inferences about the inner aspect of other organisms, even those outwardly more similar to humans, to avoid the tendency to anthropomorphise. Animal action is thus discussed with reference to Suzanne Langer’s concept of the act, a recognisable element, or identifiable process, in the dynamism of life, relying on phases of tension
and release. The act offers a mode of speaking about both micro physiological processes and macro behaviour through a single concept. Langer argues that all animal behaviour occurs through instinctual acts, gestalts that contain from the beginning an internal pressure towards their consummation. Her view of causality has much in common with the concepts of causality as ultimately relatable to the whole of change, described only as an identifiable principle of change observed as inner aspect and outer aspect. Even though we might reliably identify ways that change tends to occur in relation, this is always a limited perspective based on the identification of levels. Thus, Langer describes motivation as the relation to a situation, and the situation may be conceptualised as all else occurring outside a given process, including both levels more obviously outside an organism and lower levels of functioning internal to an organism. Observable action may be seen as an outer aspect of changes and perturbations internal to the organism, that we cannot observe. The gestalt nature of instinctual acts allows us to imagine animal consciousness in less anthropomorphic ways. Complex acts, even in animals similar to humans, do not require discrete perceptions or the awareness of goals. Rather, animal consciousness may be imagined as a gestalt form of awareness. For instance, Langer suggests that the perception of environment may occur simply as a feeling of familiarity, rather than the recognition of landmarks or objects. For the purposes of this thesis, it is hypothesised that the most basic awareness of acting, the inner aspect of complex forms of engaging with the world, may occur as a feeling, as a sense of fit, a basic sense of whether or not some adjustment needs to occur.

The discussion of action with reference to Langer clarifies the relation of the self to external circumstances, yet given the concept of the self as semi-autonomous system based on the double relation, the relation to individual history is considered in the second part of Chapter Five. The most fundamental concept through which to understand this relation is repetition, the tendency take habits suggested as fundamental to nature in Chapter Four. The form of an individual organism emerges as the outer aspect of action tendencies with a range described by the species, made possible by the evolutionary development of all less complex selves. Repetition is a way of describing that each species has a recognisable way of being, a process that emerges between the very slow process of the alteration of DNA and the rapid processes of the individual cell. Within the individual life, learning also occurs
through repetition, which is relatable to the development of the self as a semi-autonomous system, the increase of order that occurs as new levels emerge and stabilise in various stages of development.

Michael Polanyi’s concepts of tacit knowing and indwelling are used to elaborate upon the interpretation of Langer’s views, describing gestalt modes of knowing that do not rely on explicit awareness, to support the view that animal and human learning occurs through repetitious engagement in kinds of situations and does not necessarily require discrete perceptions of phenomena or conscious reflection. Polanyi’s views are very much in alignment with the basic categories underpinning this thesis, yet at times his concept of indwelling seems unclear, suggesting indwelling as an experience entered into by imaginative extrapolation but also something more akin to actual participation in the process of another. This is clarified with reference to the concepts of inner aspect or outer aspect, with the suggestion that we participate in broader processes with others, but are never wholly within any process other than our own consciousness. The broader process is a context for the inner aspect of another, but that inner aspect is always individual and interpretive. At the same time, we understand others with reference to our similar experiences, imagining, for instance, the aliveness of another by virtue of our own experience of aliveness.

The discussion of action provides a bridge between views of animal action, based in a process ontology and a hierarchical theory of nature elaborated by biosemiotics, and theories of human action. This supports the consideration of views of human life emerging from sociology and anthropology in the context of broader theories of nature and existence. Chapter Five draws on the theories of Pierre Bourdieu and Eliot Chapple, who embody the same intention as that by which process philosophy might be organised, of moving beyond absolute divisions of the subjective and objective. The work of Bourdieu in particular displays a dialectical quality, both in his understanding of theory and practice, and in the concepts of habitus and field that underpin his views. Habitus is a mode of theorising human action that is neither completely conscious or unconscious, describing action as both interpretive structure and dynamic lived experience, acquired predominantly in early life through repetitive interactions in broader social and cultural processes. These broader processes are theorised through the concept of the field. The concepts of dialectical interaction,
inner aspect and outer aspect are applied in an attempt to understand the relationship between the habitus and field. It is argued that these concepts may be understood as levels in a hierarchy, that the individual or consciousness might emerge between the habitus as constituents and field as constraints, yet that habitus and field should not be understood as in a dialectical relationship with one another, which appears at times to be Bourdieu’s view. The dialectic, understood in terms of inner aspect and outer aspect, can only be understood in the context of a single level as a process in itself, with the outer aspect describing the relation to all outside this process, rather than to a single definable higher level. This allows for a consideration of the effects of broader processes of fields, with their own inner dynamic, yet also for the interpretive aspect of habitus as a level in a semi-autonomous system. Habitus and field do not dynamically interact.

Motivation is then discussed with reference to Bourdieu’s concept of symbolic power, and it is argued that this is a limited concept that cannot take account of individual experience. Thus, the work of Chapple is introduced as a complement to Bourdieu’s ideas. Chapple theorises both individual and cultural processes, largely from a biological perspective. His central concepts of rhythm and patterns of interaction are amenable to a process interpretation and he implicitly invokes hierarchy in his descriptions. The most important contribution that Chapple’s work makes to this thesis is his centralising of the concepts of uniqueness and individuality, which he sees as characteristic even of the individual cell. This supports a view of the human being as utterly unique even by the time of birth, and offers a way of speaking about both individuality and development through repetitious interactions with others and the engagement in cultural processes. Chapple relates motivation to the ‘interactional needs’ of an individual, based on individual rhythms attempting to synchronise with those of others and avoiding instances of stress, described as asynchrony. It is argued that these concepts allow for a much broader and more detailed appreciation of positioning than that provided by Bourdieu, expanding the concept of habitus to include myriad possible positionings of a given individual in types of situations. Thus, motivation may be imagined again as the seeking of a sense of fit, and the statement is made that each individual is simply seeking to fit in the world, inseparable from seeking the recognition that the world is as each individual perceives it to be. Yet despite Chapple’s commitment to individuality and uniqueness, he does not say much
about the individual conscious experience. Like Bourdieu, the focus on action does not render it wholly unconscious, yet it also does not describe conscious experience, and this is taken as the next step for the thesis, to use the understanding of action developed in this and the previous chapter in a theory of consciousness.

Chapter Seven presents a hierarchical theory of consciousness, drawing on and responding to the theories of Joseph LeDoux and Antonio Damasio, two major figures in the neuroscientific approach to emotion and feeling. These theories are placed in the context of previous chapters, which have developed a mode of understanding the manner by which consciousness emerges from unconscious natural processes, all interpreted in relation to and aligned with the underlying process ontology. Thus, some of LeDoux’s and Damasio’s concepts may be used, particularly regarding levels of consciousness, but discussed and amended with reference to the broader process approach, illustrating once again the worth of the ontological shift, but also the possibility of engaging with the products of contemporary science, in this case neuroscience, in complex and illuminating ways.

Their work is introduced through a discussion of the terms emotion and feeling, and an attempt to define them separately. Emotion, as befits its etymology, is conceptualised as a ‘moving out’, a need to adjust in relation that is amenable to the concept of action already discussed, whilst feeling retains its origins as referring to an ‘inner sensing’. These definitions are discussed with reference to the understanding of emotion and feeling from the field of psychology, in which emotion appears often to be treated as an outer aspect, observable in action and relevant to the formation of social relations. Feeling is generally described as the experience of emotion, but the importance of making the distinction between emotion and feeling appears unrecognised, although the notion of conscious and unconscious causes of emotion and emotional responses is mentioned in relation to the neuroscientific understanding of primary and secondary appraisal.

Primary and secondary appraisal is discussed with reference to the work of Joseph LeDoux, who uses the terms implicit and explicit appraisal in relation to the neurophysiology of emotion. Implicit appraisal refers to the faster appraisal of situations, via a more direct neuronal pathway that institutes responses to situations
prior to conscious appraisal, whilst explicit appraisal occurs within conscious awareness. Implicit appraisal is involved in the formation of implicit memories that are described with reference to conditioning; these memories are repetitions of responses to situations in ever widening contexts, heavily dependent upon early development of the brain and difficult to undo. The concept of implicit appraisal is thus well placed in a theory of the self as semi-autonomous system and corroborates the prior discussion of action and the concept of the emergence of consciousness as a gestalt, although if emotion is understood through implicit appraisal, the relation to conscious experience, particularly feeling needs further exploration. Antonio Damasio’s theory of feeling and consciousness is thus drawn upon as a mode of schematising consciousness through a three levels perspective. Damasio essentially presents two models of consciousness, one that hierarchically relates biological processes of life regulation, emotion, feeling and ‘high reason’ or extended consciousness, and another that develops the concept of levels of self. The proto-self appears to be a kind of representation of physiological states relating to life regulation, and from this emerges consciousness as the core self, a basic state of the self in the act of knowing that occurs as the relation between inner states and the perception of objects. Finally, the autobiographical self describes the functioning of explicit memory and explicit processes of consciousness. It is argued that these models need to be brought together, clarifying some ambiguity in Damasio’s ideas, with the most important point being that core consciousness should be considered feeling, providing a way of describing feeling as a basic sense of self in relation, both to external circumstances and individual history, and as a level in itself.

The three levels hierarchical view of consciousness is then used to interpret Martha Nussbaum’s approach to emotion. She presents her view of emotion as neo-Stoic, centrally concerned with *eudaimonia* or flourishing, a cognitive-evaluative view based on an expansive concept of judgment as an assent to an appearance. It is argued that this view allows us to speak of the cognition observable in action yet not directly within conscious awareness. This goes against Nussbaum’s view that the cognition of emotion should be accessible to conscious awareness in the majority of cases, creating a view of emotion that gives a greater weighting to beliefs that are not explicitly conscious than Nussbaum does, in keeping with the prior theorising of human action. Emotion is considered a particular kind of action related to beliefs that are important
in sustaining the sense of self, although given that all action is inherently purposive it is difficult to bracket emotion as one kind of action. It is argued that feeling emerges from emotion, as lower level changes observable as outwardly directed action, in the context of the higher level descriptions of situations provided by extended consciousness. Extended consciousness is discussed in relation to its role in the maintenance of the self as semi-autonomous system, as needing to mediate the perception of external situations and feeling. Given the weighting of implicit appraisal and memory to early stages of development though, and the tendency of these lower level and more general interpretations to repeat in many contexts, acting as the constituting level of feeling, it is argued that extended consciousness is limited in its possible descriptions and that the possibility for choice amongst alternative descriptions is somewhat paradoxical.

Chapter Eight discusses the development of feeling in the context of the previous chapter and its distinction between emotion and feeling, based on the theory of consciousness and its emergence from nature in which this distinction is placed. It draws on Nussbaum’s views of infant development as a mode of conceptualising both the process of development in itself and the way that the history of interactions is present in the sense of self as feeling. Nussbaum draws on modern psychoanalysis, extending some of its major insights through a discussion of the work of Lucretius, who creates a view of infant development based on three facets of infant need; bodily needs, the need for comfort and reassurance, and the need for exploration and discovery, the latter two of which, particularly exploration, she claims are underemphasised in psychoanalysis. The infant’s interactions with the world, in particular primary caregivers, mediate the development of a secure sense of self which in turn mediates the degree to which difference can be accepted, occasioning delight for the infant in her explorations of the world. This trajectory of development is discussed with reference to basic experiences of separateness and connection, and joy and fear, resulting in degrees of openness or closedness to situations. It is argued that the sense of self as feeling that develops is inherently relational and therefore also describable as causal beliefs about ways one may or may not have an effect in the world, particularly given the development of implicit memories early in life as boundaries are learnt through feeling experiences arising from repetitive interactions, without higher level explicit understanding. This view then allows for reflection on
the concept of habitus as utterly unique and individual for every person, as the
detailed memories of situations constituting the general interpretations of situations
that emerge as feeling. This mode of conceptualising the sense of self highlights the
importance of maintaining an adequate sense of fit in the world; the self depends on it.
The relationship between feeling and extended consciousness is then further discussed
with suggestions regarding the ways extended consciousness might at times override
implicit memories, minimising feeling in the maintenance of the self.

The theory of consciousness, that posits feeling as the most basic and inherently
relational sense of self is then used in Chapter Nine to reflect on the problems of the
co-influence of experience and understanding identified in relation to the work of
Lakoff and Johnson. Feeling emerges as the perception of differentiation, a gestalt
that is both an experience and an understanding. The implicit appraisal at the level
below feeling is described as the categorisation of types of situations, and the
emergence of feeling as the interpretation of these inner yet unconscious changes in
relation to external circumstances is described as metaphor. It may thus be clearly and
simply stated that feeling is metaphorical experience. This view of feeling allows for
the redefining of some aspects of Johnson’s work on image schemata, in particular
that the repeated physical engagement with objects forms a natural dimension of
experience, only separable in theory from feeling as a gestalt that is always inherently
meaningful and purposeful.

Lakoff and Johnson’s claim that linguistic metaphors hold due to their basis in either
experiential co-occurrence or experiential similarity is then reflected upon, with the
implicit appraisal of situations based on previously experienced contexts taken to be
an instance of experiential co-occurrence, and the similar experience at the level of
feeling in relation to different situations defined as experiential similarity. The
characterisation of feeling as metaphorical avoids the problem of direct, immediate
experience; the similar experiences at this level are already and necessarily
metaphorical. Thus, feeling is described as a general understanding of situations that
occurs in relation to detailed positionings present in current circumstances that are
unique to every person given their detailed history of interactions. Feeling is therefore
summarised in the concept of unique, individual metaphors, the detailed set of beliefs
that form and develop the self in relation to its own history.
Identifying feeling as unique individual metaphors opens up the possibility for change. Our potential to effect change, altering metaphors to alter experience is then discussed with regard to the basic concept of change as cause. Given the underlying wholeness of change, and the fundamental categories of process and relation, inner aspect and outer aspect, it is argued that all that we might observe outside ourselves is in relation to the self. This point may be made without assuming that describing such relations is the limit of possible descriptions of any situation. Yet it is claimed that we can identify our unique, individual metaphors by attending to the way that situations we come across tend to repeat. The entire theory presented in this thesis then supports the statement that if we change the inner aspect of the self, the outer aspect of the self also changes, and this can be witnessed in the actual situations that happen in our lives, a statement of reality rather than one of perception. Ways we might change the inner aspect are then summarised as a set of principles that may be understood to bring the levels within and outside of the self into greater harmony. The process begins with altering the conscious description of situations by altering the ontological metaphor and then follows iterations of observing changes in feeling and altering explicit descriptions. The major change at the level of explicit, languaged consciousness that is assumed to support this process is the alteration of ontological metaphor.

In the conclusion, these principles for bringing the self into greater harmony are then used to interpret the flexible optimism advocated by Seligman. The limitation of this strategy to the alteration of conscious descriptions of situations is seen to misunderstand the role of feeling and causal relationships. Thus, whilst it may be accepted that such change of conscious descriptions has some effect, this effect is both limited and may in fact exacerbate discontinuity between the self and the world. A change at this level needs to be understood in relation to the whole self interacting in the world, not only to most reliably effect change for the individual, but to centralise the point that our descriptions of situations both matters and has an effect beyond our individual psychological functioning, a point well beyond the explanatory power of positive psychology. The effect of the alteration of ontological metaphor, including the effect on the world as the outer aspect is then clarified through a discussion of blame. It is argued that individuals can both release blame at the
individual level and hold others accountable for their actions, invoking higher level cultural constraints in the maintenance of and possibilities provided by culture. These are seen as two different modes of causal engagement, redescribed with reference to hierarchy theory and biosemiotics, which can both justify cultural constraint and support the harmonising of levels inside and outside the individual, with the latter deemed the deepest kind of agency. Furthermore, this kind of agency, accepting that change of the inner aspect also changes the outer aspect, or relation to all else, moves beyond choices between individual and collective fulfilment. It is argued that extreme forms of empowerment, such as *The Secret*, misunderstand causal relationships and therefore cannot make this point. Whilst *The Secret* suggests, as this thesis does, that both feeling, thought and external circumstances should change, the lack of explanation of causes beyond the linear and mechanistic renders it extremely individualistic, and, furthermore, encourages people to see themselves as defective when their efforts to change come to nothing.

Finally, in keeping with dialectics, this thesis is described as a dialogue that may be expected to change, and both the advantages and limitations of the interdisciplinary inquiry in which this thesis participates are pointed out. The possibility of the rather grave criticism that the theory presented in this thesis explains repetition in a person’s life but not why something happens in the first place is attended to. The admission is made that the possibilities for altering the experience of the self can only be understood in relation to the ontogenetic trajectory of the self, that the instantiation of the process of the self cannot ultimately be explained. At the same time, it is argued that engaging with the process of releasing blame, as described, holds also for singular events, and that rather than belittling the extreme suffering that some people experience, this offers the possibility for change rather than passive acceptance of experiences of fear and disconnection. In conclusion, the theory presented in this thesis can only prove itself in practice, and whilst such ‘proof’ is necessarily circular, as dialectics describes, the intention of this thesis well beyond theory is that people experience greater connection with themselves and with others and the joy that this engenders.
Chapter One
The Role of Metaphor in the Generation of Experience and Understanding

As the thesis summary in the preceding introduction indicates, this thesis takes a rather complex course in an attempt to place theories of nature, consciousness and feeling in the context of a process ontology. The intention is to uphold a commitment throughout to theorising that is consistent with and explicitly aware of underlying ontological assumptions, such that a genuine alternative to the reductionist, mechanistic world view of science can be offered. The goal of such an altered world view is ultimately to conceptualise ways in which we, as human beings, might deeply alter our experience of ourselves in the world, so that we might then reflect upon and evaluate therapeutic techniques offered by psychology, self-help and New Age views with reference to this theory.

As already mentioned a number of times, the major theoretical move attempted by this thesis is that beyond the subject/object dualism. Yet this is not a new endeavour by any means. As will become evident through this thesis, many theorists from different disciplines attempt such a move. Yet, as will also be clear, many theorists, particularly those working in disciplines other than philosophy, do not engage with ontology and this often results in theory that remains limited even as it creates new modes of conceptualising. The following engagement with the work of George Lakoff and Mark Johnson’s is intended to illustrate the point that a paradigm shift at the level of ontology is required to better conceptualise human experience and understanding, as well as to acknowledge and make use of their major contribution to Anglo-American theory. Furthermore, their theory of metaphor makes very clear that even if some areas of science have moved well beyond a mechanistic and reductionist ontology, the language and concepts of contemporary Western culture remain deeply entrenched in this world view; indeed, this point reflects also upon this thesis: careful and detailed theorising of consciousness and its emergence from nature, in the context of a process ontology is necessary before we can speak differently about human experience and understanding, and it is for this reason that a discussion of human
experience and understanding will only be returned to in the latter stages of this thesis.

In their book *Metaphors We Live By*, Lakoff and Johnson offer a largely linguistically based theory of metaphor, yet they suggest many times the application of their concepts beyond this. This chapter will discuss their theory in detail so as to point out what is missing, most importantly a discussion of ‘qualitative experience’, or feeling, and how their theory might be expanded by being positioned in a process view of nature and consciousness. The worth of beginning with their theory is not only to point out the need to establish a new underlying theory, but also to understand the concept of metaphor, which will influence the conceptualisation of feeling in the final chapters of this thesis. Metaphor, when positioned in a theory of nature based in a process ontology, can be seen as essentially resembling natural processes, such that the dynamic and structure of language use can be seen as similar to the dynamic and structure of natural processes generally. Eventually it will become apparent that using the term metaphor in the conceptualisation of qualitative experience, or feeling, can preserve both the gestalt and often inchoate nature of feeling as an inner experience as well as its highly structured and detailed aspects, and this in turn allows for the application of concepts used by Lakoff and Johnson’s in the analysis of linguistic metaphor to the analysis of feeling. The concept of metaphor thus helps us to genuinely forge a path beyond the absolute and relative, the objective and subjective.

**Metaphor**

Lakoff and Johnson explore the way that metaphor shapes understanding and experience by detailing the pervasiveness of metaphor in our everyday lives. Even when largely limited to a discussion of language, their view is radical in comparison to the view we generally take for granted in this objectivist culture, in which an objective viewpoint provides us with objective knowledge, meaning and communication about a world that is inherently the way we perceive it to be. Comprehending the role of metaphor is one way of clarifying much of what the objectivist viewpoint misses.
Lakoff and Johnson say that

*The essence of metaphor is understanding and experiencing one kind of thing in terms of another.*

The presence of both understanding and experience in this definition of metaphor is key to their theory, and this insight is reflected also in their view that metaphor is not limited to language.

The most important claim we have made so far is that metaphor is not just a matter of language, that is, of mere words. We shall argue that, on the contrary, human *thought processes* are largely metaphorical. This is what we mean when we say that the human conceptual system is metaphorically structured and defined. Metaphors as linguistic expressions are possible precisely because there are metaphors in a person’s conceptual system.

Thus, our conceptual system does not operate only through language. It must be intimately tied to our experience and our understanding. Yet, as already suggested, there are unavoidable difficulties involved with discussing the broader conceptual system that provides the possibility for language. Lakoff and Johnson are aware of this but confident enough that some insight can be gained by looking at language.

Our conceptual system is not something we are normally aware of. In most of the little things we do every day, we simply think and act more or less automatically along certain lines. Just what these lines are is by no means obvious. One way to find out is by looking at language. Primarily on the basis of linguistic evidence, we have found that most of our ordinary conceptual system is metaphorical in nature.

Yet this linguistic basis of their theory makes it difficult to grasp how Lakoff and Johnson’s concepts of understanding and experience interact with and influence each

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50 Ibid., p 6.
51 Ibid., p 3-4.
other. Lakoff and Johnson do acknowledge the paradox of theorizing and communicating through language about the way that metaphor works in our experience and understanding in realms other than language. Even though there is much to be gained from understanding how our conceptual system might function through language, by exploring the workings of metaphor with language, the paradox of theorizing beyond language remains. Indeed, this paradox is one with which all attempts to theorise must contend, expressible in the most fundamental sense as the relation between epistemology and ontology. Process philosophy, it will be argued in Chapters Two and Three, offers a way of grappling with this. Nonetheless, for the purposes of the current discussion, the way that Lakoff and Johnson fit metaphor into our perception and experience of reality will be shown to provide a starting point for a broader perspective.

Before discussing Lakoff and Johnson’s concepts of understanding and experience, it is worth making some remarks about the functioning of metaphors. One of the most fundamental points Lakoff and Johnson make is that using metaphor to understand one kind of thing or experience in terms of another suggests one possibility among many, implying the basic claim that meaning is fluid or at least potentially changeable, rather than fixed.

The very systematicity that allows us to comprehend one aspect of a concept in terms of another (eg. comprehending an aspect of arguing in terms of battle) will necessarily hide other aspects of the concept. In allowing us to focus on one aspect of a concept (eg. the battling aspects of arguing), a metaphorical concept can keep us from focusing on other aspects of the concept that are inconsistent with that metaphor.52

Thus, one of the fundamental characteristics of metaphor is that it is a process of selection; we gain understanding or experience of some aspects of a secondary phenomenon always at the expense of other potential understanding or experiences. If every aspect of a phenomenon could be highlighted or understood through a given

52 Ibid., p 10.
metaphor then “one concept would actually be the other, not merely be understood in terms of it.”

Lakoff and Johnson show that metaphors are systematic and coherent. Different metaphors can work together to highlight different aspects of a phenomenon in systematic ways that may not always appear logically consistent yet still make sense to us. Some types of metaphor appear to be more fundamental than others. Lakoff and Johnson identify structural, orientational and ontological metaphors.

The term ‘structural metaphor’ refers to concepts that metaphorically structure other concepts in the sense that we project what we know and understand of the first ‘kind’ of phenomenon onto the second ‘kind’ in a way that lends partial structure to the second ‘kind’.

So when we say that a concept is structured by a metaphor, we mean that it is partially structured and that it can be extended in some ways but not others.

The defining feature of structural metaphor is that it involves the case in which one concept structures another. Orientational metaphors appear to be more fundamental and complex metaphors, in that they organize whole systems of concepts rather than structuring one concept in terms of another. Lakoff and Johnson say that:

Such metaphorical orientations are not arbitrary. They have a basis in our physical and cultural experience.

Most orientational metaphors relate to spatial orientations such as up-down, in-out, front-back, on-off, deep-shallow, central-peripheral. For instance, Lakoff and Johnson explain the extensive application of the concepts ‘up/down’ in this culture. Examples of this include ‘happy is up, unhappy is down’, ‘conscious is up, unconscious is down’, ‘more is up, less is down’, ‘good is up, bad is down’ and ‘rational is up, emotional is down’. In all of these cases we might use a multitude of

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54 Ibid.
55 Ibid., p 14.
56 Ibid.
words and expressions to describe a concept relating to the basic orientation of up and down. That this basic orientation emerges from the experience of our bodies in the physical environment seems fairly straightforward. Metaphorical concepts that elaborate upon this basic orientation can be traced to either a physical or social basis.

Ontological metaphor is the third kind of metaphor outlined. It allows us to project our experience of physical objects and substances. Importantly, these metaphors are related to our ability to reason:

Understanding our experiences in terms of objects and substances allows us to pick out parts of our experience and treat them as discrete entities or substances of a uniform kind. Once we can identify our experiences as entities or substances, we can refer to them, categorize them, group them, and quantify them – and by this means, reason about them.\(^57\)

The pervasiveness of entity and substance metaphors in contemporary Western culture cannot be overemphasized. Reductionist thinking and, particularly, the practice of mechanistic science are based on the experience of entities and substances and their metaphorical projection. The dominance of these metaphors, in line with the dominance of mechanistic science, greatly limits possibilities for changes in thinking. As already mentioned, the point that these metaphors are deeply entrenched in the world view and everyday language of this culture clearly explains why general modes of conceptualizing resist change even though many branches of science may have moved well beyond a basic mechanistic, reductionist orientation.

Understanding the functioning of ontological metaphors that emerge from the comprehension of entity and substance also illustrates the important point that mechanistic and reductionist thinking is genuinely related to our physical interactions in the world, and it will be more fruitful to extend theories to both account for this and show its limitations, rather than simply claiming that such metaphors are neither true

\(^{57}\) Ibid., p 25.
nor useful. Lakoff and Johnson acknowledge this point, particularly in their discussion of Objectivism.\textsuperscript{58}

According to their schematizing of metaphor, orientational and ontological metaphors appear to provide more general and fundamental modes of understanding the world, whereas structural metaphors generate more detailed understanding.

Structural metaphors allow us to do much more than just orient concepts, refer to them, quantify them, etc., as we do with simple orientational and ontological metaphors; they allow us, in addition, to use one highly structured and clearly delineated concept to structure another.\textsuperscript{59}

Despite their differences in level and type of application, Lakoff and Johnson say that all metaphors that come into use emerge from actual experience. Indeed,

\textit{In actuality we feel that no metaphor can ever be comprehended or even adequately represented independently of its experiential basis.}\textsuperscript{60}

If there is an experiential basis to metaphor, we might simply assume that we somehow understand the first ‘kind’ of phenomenon, which we use to understand the second ‘kind’ of phenomenon, directly from our experience. Yet Lakoff and Johnson explicitly state that there is no such thing as direct physical experience, that “all experience is cultural through and through”,\textsuperscript{61} implying that any understanding of experience is learnt, and making it difficult to imagine something like actual experience from which understanding builds. It is indeed challenging to move beyond the assumption that there is some level at which experience is unmediated and of an objective outside world, yet we must continually return to the notion that metaphor applies not only to the understanding of experience, but to experience itself.

The difficulty is partially attributable to Lakoff and Johnson’s admission that they know very little about the ‘experiential basis’ of metaphor.

\textsuperscript{58} Ibid., p 220-1.
\textsuperscript{59} Ibid., p 61.
\textsuperscript{60} Ibid., p 19.
\textsuperscript{61} Ibid., p 57.
We do not know very much about the experiential bases of metaphors. Because of our ignorance in this matter, we have described the metaphors separately, only later adding speculative notes on their possible experiential bases.62

Whilst a theory of experience does emerge from their work, statements like these highlight the epistemological nature of their exploration, which appears at times to be a theory of mind, returning us once again to the problem of using linguistic analysis to make inferences about the non-linguistic.

As mentioned, Lakoff and Johnson introduce various concepts in an attempt to resolve this problem, including the ‘natural dimensions of categories’, which include situations we might generally consider direct experience, such as sense perceptions. Their descriptions of projection and grounding provide much insight into the arising of experience and the emergence of concepts and metaphors. This will be discussed before exploring understanding and experience in more detail, in an attempt to clarify the relationship between understanding and experience and to draw out some of the limitations of Lakoff and Johnson’s view.

Grounding

Even though Lakoff and Johnson admit knowing very little about the experiential bases of metaphor, the concept of grounding is an attempt to show that our conceptual system, and therefore our metaphors and concepts, emerge from experience. Given the previous discussion of experience, Lakoff and Johnson’s choice of ‘grounding’ as a metaphor is interesting indeed. This term highlights our tendency to perceive that our conceptual system is grounded, implying that there are some solid, supportive and foundational experiences underlying our conceptual system. Indeed, it appears that speaking about experience requires that we imagine something like grounding, yet such a view of more and less direct experience generates conceptual difficulties. The

62 Ibid., p 19.
Lakoff and Johnson say that all of the three fundamental types of metaphor are “grounded in systematic correlations in our experience”, and that grounding occurs in relation to those aspects of our experience that are clear and consistent. Thus, our conceptual system is viewed as grounded in physical experience, even though physical experience is not taken as more basic than other kinds of experience. Rather, physical experience is seen as more easily conceptualized than other kinds of experience. Lakoff and Johnson claim that “we typically conceptualize the nonphysical in terms of the physical – that is, we conceptualize the less clearly delineated in terms of the more clearly delineated.”

For instance, although our emotional experiences and our spatial perceptions might be equally basic experiences, spatial perception offers a more clearly delineated experience through which to conceptualize and therefore communicate about emotions. Furthermore, the spatial metaphors that orient our conceptions of emotions, such as ‘happy is up’, are based in genuine correlations in our experience; the experience of happiness tends to be associated with more erect posture. Thus, the metaphor ‘happy is up’, is grounded in a spatial perception. Lakoff and Johnson introduce the concept of emergence to clarify their observations. The fact that concepts and metaphors arise from experience in a way that is not reducible to experience, nor the only possible method of conceptualizing is well accounted for by the concept of emergence. This provides a strong link to some process theories, which will be further articulated in Chapters Two and Three.

The most important point to grasp at this stage is that we use our more clearly delineated experiences to conceptualise those that are less clear, and the direction this typically takes is to conceptualise the nonphysical in terms of the physical. The term ‘clearly delineated’, though, seems an unfortunate choice of terminology, as it is not readily apparent how exactly some experiences can be more clearly delineated than

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63 Ibid., p 61.
64 Ibid., p59.
others. However, the term does suggest visual perception, which provides an interesting link to the current pervasiveness of entity and substance metaphors.

**Categorization and Projection**

Categorization is one of our most fundamental ways of making sense of the world. It allows us to organize our perceptions of objects and situations and relate them to other objects and situations. Importantly, categorization is related to actual perceptions, but not limited to them.

Categories are neither fixed nor uniform. They are defined by prototypes and family resemblances to prototypes and are adjustable in context, given various purposes.\(^{65}\)

The process of categorization is very similar to that of metaphor.

A categorization is a natural way of identifying a *kind* of object or experience by highlighting certain properties, downplaying others, and hiding still others.\(^{66}\)

Thus, Lakoff and Johnson conceptualise sub-categorization and metaphor as being at either end of a continuum rather than as always discrete and distinguishable methods of understanding. The difference between the extremes at each end is that categorization picks out characteristics to identify phenomena of the same kind and then applies general conceptions of that ‘kind of phenomena’ to the particular case, whereas metaphor involves the application of similarity between different kinds of phenomena.

The distinction between metaphor and categorization helps to make sense of projection, and the difference between metaphorical and non-metaphorical projection. Lakoff and Johnson say that

\(^{65}\) Ibid., p 165-6.
\(^{66}\) Ibid., p 163.
when the categories that emerge from direct physical experience do not apply, we sometimes project these categories onto aspects of the physical world that we have less direct experience of.\textsuperscript{67}

For instance, we project physical orientation onto things that have no inherent orientation and entity structure onto phenomena that are not clearly delineated in space. One example discussed by Lakoff and Johnson is the sentence ‘The fog is in front of the mountain’, in which entity structure and orientation are projected onto phenomena that have no inherent boundaries (fog) or orientation (mountain).\textsuperscript{68} In this case projection is non-metaphorical, as these projections remain within the realm of the physical. The only difference between this and metaphorical projection is, like the difference between categorization and metaphor, the fact that projection is between realms that we usually understand to relate to different kinds of things.

All of these concepts continue to highlight that human understanding is always related to human perceptions and purposes in a way that makes much more sense to conceptualise in terms of interaction and interpretation rather than reception of an absolute external reality. Whilst Lakoff and Johnson’s discussion is quite complex and it is at times difficult to fit their many concepts and points of argument together, this particular theme emerges clearly and as fundamental to their work.

**Experience**

The concepts described so far can begin to offer some framework for understanding metaphor as fundamental to the formation of the human conceptual system. However, as alluded to earlier in this chapter, more detailed discussion is required to further conceptualise the relation to experience, such that experience and understanding might be mutually formative. A number of points that appear to be fundamental to Lakoff and Johnson’s view of experience can begin to offer some clarification.

\textsuperscript{67} Ibid., p 161.
\textsuperscript{68} Ibid., p 162.
The first involves accounting for the way that phenomena are presented to us and influence our experience. One aspect of this is to understand how sense perceptions fit with experience but are not constitutive of it. Sense perceptions are accounted for as one of four natural dimensions that provide us with information that we use to categorize. Natural dimensions are listed as following:

- **Perceptual**, based on the conception of the object by means of our sensory apparatus; **motor activity**, based on the nature of motor interactions with objects; **functional**, based on our conception of the functions of the objects; and **purposive**, based on the uses we can make of an object in a given situation.\(^6^9\)

These natural dimensions for categories, which may be simply described as the way things tend to appear to us, are distinguished from the ‘natural dimensions of experience’, describable as basic categories that we form according to the way things tend to happen. These dimensions seem to be strongly anchored in our physical experience of moving through the world and encountering situations. Lakoff and Johnson list as some of the natural dimensions of experience:

- **Participants**: ourselves as actors and other kinds of participants;
- **Parts**: our bodies as having parts; experiencing objects as having a part-whole structure or imposing such structure on them; imposing part-whole structure on events
- **Stages**: our motor functions involve knowing what to do and moving through the stages of action (initial conditions, beginning, middle, end)
- **Linear sequence**: knowing how to sequence our actions; relates to stages
- **Purpose**: knowing what actions might satisfy our needs and desires\(^7^0\)

Perceiving experience through such parameters enables the imposition of structure, facilitating understanding and providing coherence and direction. Lakoff and Johnson claim that

*experiential gestalts are multidimensional structured wholes.* Their dimensions, in turn, are defined in terms of directly emergent concepts. That is, the various

\(^{69}\) Ibid.
\(^{70}\) Ibid., p 82.
dimensions (participants, parts, stages, etc.) are categories that emerge naturally from our experience.\textsuperscript{71}

To elaborate on the view of metaphor already presented, understanding natural dimensions allows us to say that metaphors provide the particulars for structuring and thereby clarifying experience, drawing on situations in which the natural dimensions for categories and the natural dimensions for experience are clear and applying them to those that are less clear.

The view of experience as a gestalt is a key point, which Lakoff and Johnson also refer to as ‘basic domains of experience’. Experiential gestalts are experientially basic, as they are recurrent structured wholes in our experience. Thus,

\begin{quote}
Domains of experience that are organized as gestalts in terms of such natural dimensions seem to us to be natural kinds of experience.\textsuperscript{72}
\end{quote}

These natural kinds of experience are said to be a product of:

\begin{quote}
Our bodies (perceptual and motor apparatus, mental capacities, emotional makeup, etc.)
\end{quote}

\begin{quote}
Our interactions with our physical environment (moving, manipulating objects, eating, etc.)
\end{quote}

\begin{quote}
Our interactions with other people within our culture (in terms of social, political, economic, and religious institutions)\textsuperscript{73}
\end{quote}

Whilst Lakoff and Johnson definitely draw out different elements of a perspective on experience, the way these fit together is not all that well schematized, probably not least because they are dealing with complex aspects of human life. Whilst they do not explicitly put the three perspectives that all influence their conceptualisation of

\textsuperscript{71} Ibid., p 81.
\textsuperscript{72} Ibid., p 117.
\textsuperscript{73} Ibid.
experience together, it seems useful to do so. The most explicit definition of experience seems to be in terms of the experiential gestalts that may be understood as natural kinds of experience. These are made possible by the natural dimensions of experience, information that we receive from the external world and/or project onto it. These in turn are also, at least in part, made possible by the natural dimensions for categories. Obviously these three points are key insights for their view of experience, linked as they are by the term ‘natural’. Lakoff and Johnson use this term to mean ‘products of human nature’, which may be described, at this point, as simply arising from the human experience.

It is worthwhile to highlight the importance of the difference between the two kinds of ‘natural dimensions’, of categories and of experience, and the ‘natural kinds’ of experience. The term dimension implies influencing information that would not, on its own, describe experience. This fits with the gestalt view of experience already mentioned. Actual experience seems to come solely under the generality of ‘natural kinds’. Lakoff and Johnson propose that “the concepts that occur in metaphorical definitions are those that correspond to natural kinds of experience.” Natural kinds of experience may either define or be defined by other natural kinds of experience. The same ideas apply as were mentioned earlier with regard to basic types of experience; metaphors are formed through the clearer and more delineated of our basic experiences, to understand the less clear and delineated, yet nonetheless equally basic experiences. Some of the examples that Lakoff and Johnson give of those natural kinds of experience that define others are physical orientations, objects, substances, seeing, journeys and war. Examples of natural kinds of experience that are less clear and therefore defined by concepts similar to those listed are love, time, ideas, understanding, happiness and health. It is worth noting that the ‘more clear’ natural kinds of experience do seem to relate more to visual perception than those that are apparently less clear, as was suggested in the discussion of grounding. Yet whether experience that is heavily informed by visual perception is in fact more clear to us than other kinds of experience, or whether it simply seems more clear because the ways we learn to define experience have developed in a visual, object-oriented

74 Ibid., p 118.
75 Ibid.
culture should be questioned. This returns, once again, to the difficulty of characterizing the co-influence of experience and understanding.

Whilst there is much in Lakoff and Johnson’s argument that seems intuitively correct and well theorised, it remains difficult to grasp in its detail. One may have a sense of understanding the direction of their argument, in its radicalization of human experience, yet still be left without clarification as to very basic questions, such as how best to characterise human experience. They have obviously, given the prior discussion, given us many strategies and concepts through which to imagine experience differently, but the tendency remains to link metaphor more strongly with the conceptual system than with experience per se. Though they acknowledge that different metaphors can create a different human reality, making a distinction between ‘metaphorical experience’ and ‘the metaphorical conceptualising of experience’ remains as a lingering difficulty.

Returning to the notion of grounding described earlier, Lakoff and Johnson maintain that

> Our general position is that conceptual metaphors are grounded in *correlations* within our experience. These experiential correlations may be of two types: *experiential co-occurrence* and *experiential similarity*.\(^{76}\)

Experiential co-occurrence refers to situations in which we do not experience any similarity; their example is the ‘more is up’ metaphor; adding more of a substance and seeing the level rise are taken to be different experiences, perhaps one as motor function relating with objects or substances and one as visual perception. Experiential similarity refers to cases in which there is some similarity in our actual experience of two different phenomena. They claim that “the only kind of similarities relevant to metaphors are *experiential*, not *objective*, similarities.”\(^{77}\) Thus it would seem that even those natural kinds of experience that are not clearly delineated have something experientially in common with those that we use to metaphorically define them. However, highlighting such similarity is with reference to grounding and still leaves

\(^{76}\) Ibid., p 155.
\(^{77}\) Ibid., p 154.
the problem of speaking about actual experience. The importance of this point should become clearer through further discussion of Lakoff and Johnson’s work.

Understanding

Understanding follows similar themes to those already mentioned, in that we understand some things directly and some things metaphorically, but this does not mean that those things understood metaphorically are any further from our reality or our genuine understanding than in those situations to which metaphor does not apply. Like the natural kinds of experience that are somehow clearer to us, and therefore used to define other natural kinds of experience, understanding can emerge naturally from our experience in a way that does not require metaphorical elaboration. Understanding gained in this way can then be applied, through metaphor, to bring about indirect understanding. With regard to direct, immediate understanding, Lakoff and Johnson say that

There are many things that we understand directly from our direct physical involvement as an inseparable part of our immediate environment.\(^ {78} \)

The parameters for such understanding include categories for experience already mentioned. These include entity structure, orientational structure, dimensions of experience, experiential gestalts, background, highlighting, interactional properties and prototypes. Those phenomena that we understand directly are then projected via metaphor to understand other phenomena, through the same categories. This brings together much of the previous discussion, and is worth quoting at length:

*Entity structure:* Entity and substance structure is imposed via ontological metaphor.

*Orientalional structure:* Orientational structure is imposed via orientational metaphors.

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\(^ {78} \) Ibid., p 176.
Dimensions of experience: Structural metaphor involves structuring one kind of thing or experience in terms of another kind, but the same natural dimensions of experience are used in both, (e.g., parts, stages, purposes, etc.).

Experiential gestalts: Structural metaphor involves imposing part of one gestalt structure upon another.

Background: Experiential gestalts play the role of a background in metaphorical understanding, just as they do in non-metaphorical understanding.

Highlighting: Metaphorical highlighting works by the same mechanism as that for non-metaphorical gestalts. That is, the experiential gestalt that is superimposed in the situation via the metaphor picks out elements of the situation as fitting its dimensions – it picks out its own participants, parts, stages, etc. These are what the metaphor highlights, and what is not highlighted is downplayed or hidden.

Since new metaphors highlight things not usually highlighted by our normal conceptual structure, they have become the most celebrated examples of highlighting.

Interactional properties: All of the dimensions of our experience are interactional in nature and all experiential gestalts involve interactional properties. This holds for both metaphorical and nonmetaphorical concepts.

Prototypes: Both metaphorical and nonmetaphorical categories are structured in terms of prototypes.79

Lakoff and Johnson return again to the example of ‘the fog is in front of the mountain’ to show that direct, immediate understanding is used in indirect understanding. Thus, for instance, projection from direct, immediate understanding of entity structure allows us to indirectly understand the fog as an entity. As already

79 Ibid., p 178.
mentioned, metaphor is not being used in this case, but the principle is the same; using the resources of direct understanding for indirect understanding via metaphor simply involves different kinds of things. In relation to this example, Lakoff and Johnson say that these “projections are built into our very perception.”80 Presumably the situation is the same with indirect understanding via metaphor, especially given the sense through their discussion that we are not aware of the degree to which metaphor plays a part in our lives. Yet Lakoff and Johnson also seem to be attempting to keep understanding and experience separate; in relation to indirect understanding, they say, of the ‘less clearly delineated’ aspects of our experience, “Though most of these can be experienced directly, none of them can be fully comprehended on their own terms.”81 Relating back to the highlighting and hiding that is fundamental to metaphor, we can say that metaphor influences our understanding such that some aspects of a phenomenon come into our awareness while other aspects remain hidden. There seems a kind of gap between experience and understanding; if we have experiences that are less clear, such as emotions, and therefore use metaphor to indirectly understand them, and this indirect understanding becomes actual perception, then it is as though the ‘hidden part of the experience’ exists elsewhere. Yet the term ‘hidden experience’ seems contradictory, particularly given that Lakoff and Johnson have characterised experience in terms of gestalts. Such points can draw out some underlying problems with their view. These will be further elucidated once their theory of truth has been outlined.

Truth

Having discussed metaphor, experience and understanding in detail Lakoff and Johnson come to their ‘experientialist theory of truth’. In this view they genuinely begin to offer a theory that finds an alternative to the extremes of objectivism and subjectivism. Their discussion of metaphor facilitates a conceptualisation of meaning and understanding as formed by humans in relation to a world that is neither objectively knowable nor completely relativist. Their view of truth is contextualised by understanding:

80 Ibid., p 177-8.
81 Ibid., p 177.
We understand a statement as being true in a given situation when our understanding of the statement fits our understanding of the situation closely enough for our purposes.\textsuperscript{82}

This view, they maintain, contains elements of a correspondence theory, yet does not attempt to objectively map statements about the world to situations in the world. Rather, they map our understanding of statements to our understanding of situations. Lakoff and Johnson’s view of truth is also contextualised by seeing truth as in relation to a conceptual system and therefore requiring coherence; elements of a coherence theory.

They claim elements also of a pragmatic theory, with their commitment to the grounding of experience, as well as elements in common with classical realism yet without “its insistence on absolute truth.”\textsuperscript{83} Some important points of this are:

The physical world is what it is. Cultures are what they are. People are what they are.

People successfully interact in their physical and cultural environments. They are constantly interacting with the real world.

Human categorization is constrained by reality, since it is characterized in terms of natural dimensions of experience that are constantly tested through physical and cultural interaction.\textsuperscript{84}

The experientialist account of truth differs from classical realism in that it includes “social and personal reality as well as physical reality”,\textsuperscript{85} with physical reality having no greater status as ‘reality’ than the social and personal. All this comes to mean that different people may have different conceptual systems, giving rise to different truths.

\textsuperscript{82} Ibid., p 179.
\textsuperscript{83} Ibid., p 181.
\textsuperscript{84} Ibid., p 181.
\textsuperscript{85} Ibid.
Metaphor, that can alter our conceptual system, can therefore give rise to new truths. Lakoff and Johnson say that

New metaphors have the power to create a new reality. This can begin to happen when we start to comprehend our experience in terms of a metaphor, and it becomes a deeper reality when we begin to act in terms of it.\textsuperscript{86}

Furthermore, “changes in our conceptual system do change what is real for us and affect how we perceive the world and act upon those perceptions.”\textsuperscript{87} Whilst Lakoff and Johnson’s theory of truth makes much of the link between truth and understanding, and builds on a grounding in experience, it does not really address the link between truth and experience, as well as understanding. Their view of the creation of reality through metaphor, anchored once again in the conceptual system remains somewhat linear; we start to comprehend experience differently, and then we may begin to act in terms of this new comprehension, but how this may eventually alter our experience is not really mentioned.

One reason why ‘metaphorical experience’ is not as explicitly addressed as metaphorical understanding or conceptualising relates to grounding, and the sense the concept provides that some experiences do not change. This relates also to those natural kinds of experience that are clearly delineated and projected via metaphor to understand other natural kinds of experience. Remembering also that we tend to understand the non-physical in terms of the physical, it would seem reasonable to infer, on the basis of Lakoff and Johnson’s discussion, that physical interaction with the world simply gives rise to reliable, repetitive and clear experiences that we can then use to understand other experiences. Claiming that some experiences are so reliable that we can confidently apply the understanding they give us to other situations through our lives certainly seems to be describing something ‘more basic’ than those we understand at least partly in terms of them. This seems to suggest that metaphorical experience is not as basic as non-metaphorical experience, which is perhaps why Lakoff and Johnson are not entirely clear about the altering of actual experience through the application of different metaphors. Viewing non-metaphorical

\textsuperscript{86} Ibid., p 145.
\textsuperscript{87} Ibid., p
experience as more basic leans towards the foundationalism that is also implied in the
concept of grounding. There seems to be tension in Lakoff and Johnson’s argument,
between creating an interactive view of human experience and understanding, and
explaining how this arises.

The problem seems to reside in their fundamental approach. Recall their definition of
metaphor as ‘understanding and experiencing one kind of thing in terms of another’,
as well as their contention that ‘human thought processes are largely metaphorical’.
The restriction of metaphor to thought processes seems to limit it to the cognitive
realm. Whilst this can reasonably be applied to understanding, it limits the discussion
from really addressing experience; we would probably imagine ‘experience’ to
involve a lot more than ‘thought processes’. One obvious way of beginning to explain
experience a little more clearly would be to pay a great deal more attention to
embodiment. Lakoff and Johnson do explicitly acknowledge the centrality of
embodiment, particularly in the link they make to phenomenology:

[The experientialist theory of truth] includes some of the central insights of the
phenomenological tradition, such as the rejection of epistemological
foundationalism, the stress on the centrality of the body in the structuring of our
experience, and the importance of that structure in understanding.88

Yet there is very little actual theorising about embodiment; any mention of the body
seems mostly in relation to the natural kinds and dimensions of experience already
described. The sense emerges that we have certain repetitive experiences by virtue of
the kinds of bodies we have as human beings. This provides us with ways of directly
understanding the world that we then apply in indirect understanding. Even though
Lakoff and Johnson genuinely attempt to create an interactive view of experience and
understanding, and to view embodiment as fundamental, there still appears to be
something missing that limits their theory.

If, for instance, experience is a gestalt, then this would imply a wholeness that does
not discriminate between mind and body. Therefore, to really understand experience,

one needs some way of speaking about both interior cognitive and bodily processes and bodily interactions with the world. If we are to genuinely speak about the way that metaphor can influence understanding and experience, we do not necessarily have to explain this in terms of metaphorical bodily processes or interactions, but we do need to have a much greater sense of how conceptualisation relates to broader experience that is not limited to thought processes.

Furthermore, if we are to understand the formation of the human experience, it does not seem to be enough to say that the most basic experiences that we use to metaphorically understand so much of our world are simply formed ‘naturally’ and ‘directly’. This would possibly make sense within an epistemology, yet Lakoff and Johnson seem to be making statements about human experience and understanding that appear unclear or inconsistent when limited to ideas about ‘knowing’. Their theory is certainly radical and powerful, yet to express the full implication of its convictions, we need to understand much more about how ‘human nature’, from which experience apparently arises, experience that can apparently be metaphorical, relates to the broader ‘nature’ in which it is situated.

The power of Lakoff and Johnson’s theory lies in the clarity and detail with which it shows that much of the understanding and experience we take for granted in our everyday lives is made possible through metaphor, and therefore, that fundamental ways of understanding the world and ourselves might be different. It follows, then, that fundamental ways of experiencing the world and ourselves might be different, and the power of understanding this lies in opening up the potential for change.

All of these issues emerge through the problem of speaking about experience as it has so far been described in this chapter. To clarify, it is worth reiterating some aspects of the relationship between experience and understanding.

Firstly, recall the statement regarding direct, immediate understanding: “There are many things that we understand directly from our direct physical involvement as an inseparable part of our immediate environment.” Yet, it was also stated earlier that there is no such thing as direct physical experience; ‘all experience is cultural through and through’. Thus even though some experiences might be ‘universal’ to humans, it
is still reasonable to say, and to infer that this is what Lakoff and Johnson mean, that some experiences will be cultural in the sense of ‘human culture’ and some will be cultural in the sense of specific human cultures. It may not always be easy to distinguish the specifically cultural from the more general culture that relates more basically to humanness.

One major insight that these points imply is that through repetitive involvement with the world and other people, understanding either builds, or repetitive experience reaches some kind of threshold from which understanding emerges. Either way, understanding forms through involvement, or simply from being alive, such that particular experiences are reliable enough that we reach direct immediate understanding. Whilst this is implied in Lakoff and Johnson’s theory, it is not explicitly discussed, yet prioritising an explanation of the formation of direct, immediate understanding opens up areas for discussion regarding the lingering difficulty with characterising the co-influence of experience and understanding. Detailing the potential expansion of the discussion towards a broader understanding than that provided by Lakoff and Johnson is intended to support an argument for a change in the fundamental ontological orientation of their theory.

The possibilities for broader discussion may be grouped into three general theoretical areas that will form the trajectory for this thesis. Evidently, from the preceding paragraphs, the theory of metaphor and the views of experience and understanding it generates would be both deepened and clarified with reference to theories of change and development. Lakoff and Johnson offer analysis of some existing metaphors and at times suggest alternatives and discuss how alternatives might change our focus and therefore our understanding. What they do not offer, however, are suggestions or strategies for change. This is probably partly related to their general epistemological orientation and the building of their theory through a discussion centred on language. Change, in relation to this, would appear to be a straightforward, albeit not necessarily easy, cognitive and analytical process.

However, looking more deeply into the development of direct, immediate understanding, much of which presumably occurs early in human life, may offer some insight into the processes that support it. This could help us to begin to identify the
possibilities for change, in the sense of being able to separate the kinds of change that are possible, meaningful and worthwhile from those areas of experience and understanding that are more simply a part of our humanness. This relates to the difference between human culture and specific human cultures already mentioned. Exploring theories of change and development should also help to clarify the link between indirect understanding, via projection and metaphor, and direct experience.

Such issues arising in relation to change and development lead very clearly to the need to account for aspects of our experience and understanding of which we are not consciously aware. One of the major difficulties with grasping Lakoff and Johnson’s theory arises from the point that the metaphorical application from direct understanding that results in indirect understanding is generally not within our conscious awareness. Thus we either need to understand the development of indirect understanding to the point where no conscious cognition is involved, or, if we decide that this process is never conscious, we need to have a theory of unconscious processes. This includes being able to account for both mental and physical processes through the same theory. Understanding the processes that support indirect understanding, for example, should help us to consider whether we might bring some of these processes of which we are usually unaware, into our conscious awareness, or indeed, whether we can alter our metaphorical understanding in ways that do not necessitate working at the level of the conscious and linguistic.

Seen in another light, the issue of unconscious processes relates also to the gestalt nature of experience mentioned earlier. If experience is a gestalt, yet some natural kinds of experience are metaphorical, and therefore might be otherwise and / or open to change, then we need some way of speaking about the possibilities for experience that are not involved with a particular gestalt tied to a particular metaphorical elaboration. This relates to the concern expressed earlier regarding speaking about those aspects of experience that are hidden by metaphor in a way that moves beyond the apparent contradiction of a notion of ‘hidden experience’. Thus, the second major area that requires deliberation to bring Lakoff and Johnson’s theory to greater fruition is a theory of consciousness, particularly an understanding of the way that consciousness filters information and certain aspects of phenomena are brought to our awareness whilst others are not. Such a theory of consciousness needs to be much
broader than a cognitive theory of mind; accounting for bodily processes and interactions and their relation to conscious experience and understanding is essential.

To genuinely support a theory of the way that understanding emerges from involvement with life and the world, a theory of consciousness needs to understand embodiment not only in terms of the individual human body but in terms of the broader world that includes all three realms named by Lakoff and Johnson; the physical, social and personal worlds. In other words, consciousness must be positioned in a theory of reality; this reflects also on the unexplored area of Lakoff and Johnson’s work that speaks of ‘natural’ experience and ‘human nature’. These terms cannot be understood independently of a world, and therefore, a theory of consciousness must be a part of a theory of nature.

In relation to identifying this particular theoretical requirement, it is worth mentioning Lakoff and Johnson’s remark that most new metaphors are structural metaphors.\(^8\) Thus, change in our conceptual system is most likely to involve the substitution of one highly structured and delineated concept for another as a means of achieving a new, detailed, indirect understanding of a phenomenon. Importantly, this suggests that change occurs most often, perhaps most readily, at the level of already complex experience and understanding. This acknowledges both the fundamental nature of ontological metaphors and the fact that such metaphors are much more resistant to change than structural metaphors, simply because the reverberations through our conceptual system following the introduction of a new ontological metaphor are of a completely different scale than changes we might need to incorporate in the context of a new structural metaphor. Enough coherence must always be maintained in our conceptual system for the acceptance of a new metaphor.

Of course, Lakoff and Johnson do not say that ontological metaphors do not or cannot change. At the same time, the construction of their view of direct understanding from direct involvement with the physical world does rely at least in part on an acknowledgment of the pervasiveness of entity and substance metaphors. It is no doubt true, insofar as anything can be true, that a great deal of our metaphors involve

\(^8\) Ibid., p 152.
projecting our understanding of the clearly delineated aspects of the physical world onto the non-physical or less clear aspects of our world, and experiences of entities and substances are very clear given largely that we experience our own bodies in both these ways. However, it is difficult to separate our perception that these are basic experiences used to understand others from the fundamental orientation of this culture at this time, in which knowledge is largely based on these metaphorical assumptions. This reflects back on the difference between general and specific human cultures. As already mentioned in relation to the link between the term ‘clearly delineated’ and a visual, object-oriented culture, we might ask whether we, or Lakoff and Johnson, prioritise these experiences as basic because they are in this culture or because they are generally for human beings. Furthermore, we might explore whether it is possible to continue to use the fundamental ontological metaphors of entity and substance in areas in which they are useful, yet open up other realms of human life and experience by applying other ontological metaphors to them. Lakoff and Johnson go part way toward suggesting this, in their advocating of the experientialist myth, yet they are not explicit about the changes they are implying at the level of ontological metaphor, or, more simply, ontology. This has already been mentioned in relation to the need for a theory of nature and consciousness. One other area that this consideration opens up emerges from a consideration of what the predominance of entity and substance metaphors hides, and this is evinced in what seems to be missing from Lakoff and Johnson’s discussion. This third area that requires theoretical exploration is the ‘feeling of experience’.

Recall Lakoff and Johnson’s views that the metaphors we use in indirect understanding are related to actual correlations in our experience. They stipulate early on in their discussion that their use of the term ‘is’, in metaphorical statements, such as ‘more is up’, will be a shorthand for referring to “some set of experiences on which the metaphor is based and in terms of which we understand it.” These actual correlations can be either experiential co-occurrence or experiential similarity. Experiential co-occurrence as a basis for metaphor is reasonably explained by the reliability of perceptions from different modalities. Experiential similarity, on the other hand, leads directly to the problem of speaking about experience. Thus, it may

90 Ibid., p 20.
be fruitful to explore what it is about two different experiences that is similar and leads us to accepting metaphorical projection from one to the other. This suggests that the cognitive level of understanding in which metaphor is used, and upon which most of Lakoff and Johnson’s argument in centred, is made possible by ‘something’ underneath that is either similar or perhaps even the same. If the creation of understanding is linear in the way Lakoff and Johnson have implied, perhaps unwittingly, this point is unremarkable. Yet if experience and understanding influence each other in more complex ways then attempting to further elucidate how this happens might mean that we can speak more clearly about how changes in metaphorical elaboration alter actual experience, not only in the realm of choices for action that Lakoff and Johnson suggest, which, again, remains a cognitive change, but in something like the way it feels to be a human being in the world, particularly the experiences we encounter that appear to be outside of our own choices and actions.

Interestingly, the possibilities for change suggested by Lakoff and Johnson in some respects parallel those suggested by positive psychology: we can make conscious choices to alter our perspective, which can provide the basis for different forms of action and therefore experience. In this way, the same underlying assumptions, particularly regarding ways we might effect change in the world, pervade both Lakoff and Johnson’s theory and positive psychology. Yet Lakoff and Johnson suggest a deeper level of experience, even though they cannot theoretically engage with it. Speaking about experience, particularly feeling, in a new way, based on an ontological shift, will not only clarify the problem of the relation between experience and understanding, but open up the potential for change.

The areas suggested for further discussion, an understanding of change and development, a theory of nature and consciousness that can take account of unconscious processes and a view of experience that can include, indeed centralise feeling, all build on one another and describe the trajectory of this thesis. The process ontology offered in Chapters Two and Three provides the most fundamental conceptualisation of change, and helps to clarify hierarchy theory and biosemiotics as theories of change and development, in Chapter Four. This provides a basis for understanding the emergence of consciousness through processes that are not
conscious, in Chapters Five and Six, which then allows for a discussion of the
development of feeling and the possibilities for change in the remainder of the thesis.

To further strengthen the argument for such broader discussion, supported by an
altered ontology, it is important to look at the direction Lakoff and Johnson have
taken since the publication of *Metaphors We Live By* twenty-five years ago.
Particularly relevant is the fact that both authors have moved their discussions more
towards embodiment, a shift that was suggested earlier in this chapter, yet have
remained somewhat limited.

**Embodiment**

Mark Johnson’s *The Body in the Mind*, published seven years after *Metaphors We
Live By*, deals specifically and in detail with embodiment, in a way that does begin to
offer further insight into experience and understanding, yet ultimately falls short of
answering the questions raised in this chapter.

The major tool around which Johnson constructs his argument is the concept of image
schemata. This appears to be a way to account for the concept of grounding
introduced by Lakoff and Johnson. He states that

> we have conceptual systems that are grounded in two ways – in basic-level and
image-schematic understanding – and are extended imaginatively by category
formation and by metaphorical and metonymic projections.\(^9\)

‘Basic level’ experience refers to gestalt perception that allows for the process of
categorization, a concept that has emerged from mainstream psychology. Image-
schemata refers to another level that “gives general form to our understanding in
terms of structures such as CONTAINER, PATH, CYCLE, LINK, BALANCE, etc.

This is the level that defines form itself, and allows us to make sense of the relations among diverse experiences.”

The concept of image schemata appears to characterise the sense of understanding and experience that emerges from repetitious and reliable interaction with the world, which can be related to the direct, immediate understanding referred to by Lakoff and Johnson. Indeed, image schemata seem to relate to the experiential gestalts that are listed as one source of direct, immediate understanding.

Typical schemata will have parts and relations. The parts might consist of a set of entities (such as people, props, events, states, sources, goals). The relations might include causal relations, temporal sequences, part-whole patterns, relative locations, agent-patient structures, or instrumental relations. Normally, however, a given schema will have a small number of parts standing in simple relations.

Johnson theorises the construction of preconceptual meaning that is integral to our way of being in the world. This kind of meaning is not propositional in the ordinary sense, but rather “exists as a continuous, analog pattern of experience and understanding.” It emerges from bodily experience. Johnson makes extensive use of the example of our understanding and experience of physical force in his discussion of image schemata. We learn about physical force through our bodies from the time of our birth.

Slowly we expand the meaning of “force”. In each of these motor activities there are repeatable patterns that come to identify that particular forceful action. These patterns are embodied and give coherent, meaningful structure to our physical experience at a preconceptual level, though we are eventually taught names for at least some of these patterns, and can discuss them in the abstract.

Johnson’s concept of image schemata may be interpreted as a process of categorisation applied to situations and activity rather than objects. Thus, image

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92 Ibid., p 208.  
93 Ibid., p 28.  
94 Ibid., p 3-4.  
95 Ibid., p 13.
schemata, at a basic level, allow us to interpret what is happening, what might happen next, what we are capable of and how to proceed. Whilst image schemata may not be limited to this, they do definitely involve a kind of understanding through repeated activity, and make sense of understanding as something like a physical gestalt.

what I am calling “image schemata” have a certain kinaesthetic character – they are not tied to any single perceptual modality, though our visual schemata seem to predominate.96

Furthermore:

It would seem that image schemata transcend any specific sense modality, though they involve operations that are analogous to spatial manipulation, orientation, and movement.97

Johnson genuinely acknowledges that image schemata are an embodied understanding. Importantly, he is also aware of the inevitable difficulty of theorising experience that is ‘nonpropositional’ or ‘preconceptual’ through the linguistic and propositional.98 Yet a similar tension to that identified in his earlier work with Lakoff seems present in his overall theory. This relates, at least partly, to theorising embodiment from an approach that is traditionally oriented towards understanding mind, an approach that may be broadly characterised as emerging from linguistics and cognitive science. Johnson creates a kind of ‘levels’ approach in which to fit schemata, that understands meaning through a progression from categorization and schemata through metaphor, polysemy and semantic change. Metaphor, he says, must be “regarded as irreducible, primary, cognitive functions by which we create and extend structure in our experience and understanding.”99 Thus, there remains an implication of meaning as built from and through basic physical experience, yet without much exploration of the body as more than the provider of information through experience that results in gestalt understanding, that may then undergo cognitive operations. This approach is entirely reasonable, and as will emerge through

96 Ibid., p 24.
97 Ibid., p 25.
98 Ibid., p 4.
99 Ibid., p 192.
this thesis, a levels approach can provide much insight into the creation of meaning and consciousness, but the references to the cognitive and the attempt to model experience in a way that is basically drawn from a cognitive perspective means that the division between body and mind is certainly challenged but not much elaborated upon. This gives rise to such statements as:

In this book I have been outlining a non-Objectivist, *semantics of understanding* to take the place of Objectivist semantics, which has shown itself to be incapable of explaining the full range of semantic phenomena we have been investigating here. In this non-Objectivist (or “cognitive semantics”) approach there are three key notions that are regarded as central: *understanding, imagination, embodiment*.

Embodiment, in this context can come to seem like something that has been ‘added on’ to improve theorising, as though remembering an overlooked element in the creation of meaning. Whilst this provides much progress in conceptualising the human experience, this thesis will attempt to challenge the thoroughness with which it occurs in an approach that does not *explicitly* question the very fundamental assumptions that feed into such distinctions as those between the mind and body and their perhaps unacknowledged continuation in such disciplines as cognitive science.

This point may be clarified by returning again to the major area through which Johnson describes image schemata, our understanding and experience of physical force. Whilst Johnson does refer to their correlates in other ways of being in the world, and mentions emotion in relation to this, his account relies very heavily on our comprehension of various types and aspects of physical force that comes through our interaction with objects. His account makes sense, but there is a limit to the freshness with which one can create a genuinely interactive account of the human being in the world when the examples used preserve the image of interaction between two discontinuous entities. Using such tangible physically based explanations also oddly preserves a certain materialism.

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100 Ibid., p 173.
The commitment to the reality of the social and personal as well as the physical that Lakoff and Johnson make is not clear when physical experience is so heavily focused upon. If such aspects of a world as a social institution or a personal connection with another human being have as strong a claim to reality as a tree or a table, then, as already mentioned, the nature of this reality must be addressed. Johnson’s focus on physical experience in the formation of image schemata deemphasises this crucial point.

As fundamental is the lack of any thorough treatment of feeling or emotion.

I urged the view that understanding is never merely a matter of holding beliefs, either consciously or unconsciously. More basically, one’s understanding is one’s way of being in, or having a world. This is very much a matter of one’s embodiment, that is, of perceptual mechanisms, patterns of discrimination, motor programs, and various bodily skills. And it is equally a matter of our embeddedness within culture, language, institutions, and historical traditions.101

There is nothing here that will be explicitly at odds with the view that will be developed through this thesis. The relevance of this passage lies much more in what is omitted rather than stated, namely any mention of what all this feels like, and how feeling and emotion enter into or are inseparable from the kinds of motivation and investment that connect or form experience in relation to all the innumerable choices we make about the various environments and situations we come into contact with, that are very literally the way we ‘have a world’.

The criticism may be made that feeling and emotion do not enter into the level of description, as image schemata are very basic patterns of assumption that we learn to rely on, through experience, about the ways that our bodies might fit into our worlds and the various physical potentials and metaphorical extensions that emerge from this. This plays strangely into helping to identify the underlying project, to understand how the mind works, rather than to account for human experience in a less compartmentalised way. These are difficult and complex issues. Indeed, it is

101 Ibid., p 137.
challenging to even draw out what is missing from the views of human understanding and experience that have been discussed in this chapter. Yet there must be a better way of speaking about the way that we are in and have a world in and through our bodies, and, very simply, it seems rather paradoxical to speak about experience without being able to speak about the feeling of experience. Johnson says that image schemata are “abstract patterns”; this term allows us to speak about image schemata, but such patterns must really exist in some way, and therefore we need to be able to speak about the way in which they are lived.

Nonetheless, Johnson offers much insight, particularly in the latter stages of his argument and his outline for directions through which to develop theories of meaning. This includes particularly his commitment, as in the earlier Lakoff and Johnson, to the fundamental role of imagination and creativity.

**Imagination**

Lakoff and Johnson, in *Metaphors We Live By*, give a fundamental role to imagination.

The reason we have focused so much on metaphor is that it unites reason and imagination. Reason, at the very least, involves categorization, entailment and inference. Imagination, in one of its many aspects, involves seeing one kind of thing in terms of another kind of thing – what we have called metaphorical thought. Metaphor is thus *imaginative rationality*.\(^{102}\)

Johnson elaborates upon this basic commitment to imagination through an extension of Kant’s view. He agrees with Kant that

*Imagination generates much of the connecting structure by which we have coherent, significant experience, cognition and language.*\(^{103}\)

\(^{102}\) George Lakoff and Mark Johnson, *Metaphors We Live By*, p 193.

\(^{103}\) Mark Johnson, *The Body in the Mind*, p 165.
He also generally agrees with the view of imagination as functioning in four related ways; reproductive, productive, schematizing and creative. However, Johnson points out that Kant does not resolve the divisions between conceptualization and sensation, and between the intellectual and the sensuous, and builds his own theory through this disagreement, concluding that

imagination is absolutely central to human rationality, that is, to our rational capacity to find significant connections, to draw inferences, and to solve problems. Kant, of course, pulls back from this conclusion, because it would undermine the dichotomies that underlie his system.\(^\text{104}\)

Thus,

If Kant’s account of imagination shows us anything, it shows us that imaginative activity is absolutely crucial in determining what we will regard as meaningful and how we will reason about it. Instead of being nonrational, imaginative structures form the body of human rationality.\(^\text{105}\)

A similar theme emerges here as discussed in relation to embodiment. As the attempt to theorise embodiment shows up the problem of the continued use of the terms mind and body, the concept of imaginative rationality highlights that our understanding and experience is both creative and subject to systematic logical inferences and projections, without really dissolving the tension that comes with simply joining these two terms. Rationality remains privileged in the way that mind does, with the term imaginative used to describe the reason that we continue to be most comfortable with; the situation would clearly be different if we opted for the term rational imagination. The problem seems to lie at least partly in our propensity to rely on outdated notions of discontinuous entities or faculties, bringing us once again to the need for a wholly different underlying approach.

As suggested earlier, Johnson’s theory contains many pointers that suggest a more fundamental ontological shift than he explicitly acknowledges. Particularly important

\(^{104}\) Ibid., p 168.
\(^{105}\) Ibid., p 169.
is his conceptualisation of the analog structures underlying our experience and understanding.

The use of such concepts as analog and pattern can begin to direct us towards a much more genuinely interactive view of the human in the world than is explicitly expressed in the earlier work by Lakoff and Johnson. Thus, Johnson makes statements such as, “[Image schemata] are definite, recurring patterns in an interaction of an organism with its environment.” Furthermore,

It is a mistake, however, to think of an organism and its environment as two entirely independent and unrelated entities; the organism does not exist as an organism apart from its environment. The environment as a whole is as much a part of the identity of the organism as anything “internal” to the organism.

The use of the term ‘organism’ here implies the direction suggested in this chapter; to fit the theory of metaphor, understanding and experience into a theory of nature.

Johnson’s theory uses intentionality to speak about the interactive nature of human understanding. “The theory of meaning that emerges from the previous chapters is intentionalistic – it locates meaning in the intentional directedness of human understanding”. Imagination plays a part in this: “grasping the meaning of something is an imaginative event we call understanding”.

Johnson mentions Heidegger and Gadamer in relation to the use of the concept of event to describe understanding. This term, along with the aforementioned concepts of analog, pattern and interaction all point towards the direction that will be taken through this thesis; namely an explicit and fundamental shift to the ontology of process philosophy. The basic assumptions and world view of a process approach will be detailed in the following chapters, with the view to demonstrating that the problems highlighted in this chapter can be effectively resolved, in relation to the

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106 Ibid., p 207.
107 Ibid.
108 Ibid., p 178.
109 Ibid., p 175.
project of articulating a broader theory of human experience and understanding in the world.

Despite the fact that these interesting directions are touched on in Johnson’s work, his more recent work with Lakoff, *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought*, positions their view of human experience, understanding and embodiment squarely in the realm of cognitive science. Whilst, again, there is much insight in their work, their choice of discipline may be interpreted as placing limits on the potential for fresh perspectives. Indeed, there is a certain paradoxical undercurrent to their work as they laud the new directions and possibilities for conceptualising embodiment through the realm of cognitive science. Thus, they see potential in, “the empirical study of the mind”,110 for exploring the “three major findings of cognitive science”, listed as the statements:

The mind is inherently embodied.
Thought is mostly unconscious.
Abstract concepts are largely metaphorical.111

We have seen through their earlier work that it is fruitful to explore the metaphorical nature of abstract concepts, and this would seem to fit well enough with cognitive science, which uses “the term cognitive…for any kind of mental operation or structure that can be studied in precise terms”;112 hence the possibility for exploring metaphor essentially through linguistic analysis. However, the notion of the ‘cognitive unconscious’ that plays heavily into the first two of their three statements, seems a little more problematic. They follow their statement as to the meaning of the term cognitive with “Most of these structures and operations have been found to be unconscious.”113 If these ‘structures and operations’ are unconscious, indeed mostly unconscious, we might seriously question how exactly they have been ‘found’, in any sense more than ‘there is a whole lot going on, of which we are unaware, before we can form conscious concepts’.

111 Ibid., p 3.
112 Ibid., p 11.
113 Ibid.
As is the practice in cognitive science, we will use the term *cognitive* in the richest possible sense, to describe any mental operations and structures that are involved in language, meaning, perception, conceptual systems, and reason. Because our conceptual systems and our reason arise from our bodies, we will also use the term *cognitive* for aspects of our sensorimotor system that contribute to our abilities to conceptualise and to reason. Since cognitive operations are largely unconscious, the term *cognitive unconscious* accurately describes all unconscious mental operations concerned with conceptual systems, meaning, inference, and language.\(^{114}\)

Whilst the aim of this chapter, and this thesis, is not to provide a detailed and thoroughgoing critique of the discipline of cognitive science, it will hopefully not require too much discussion to point out the difficulties with this approach. With regard to this extract, it is worth mentioning that using the word ‘mental’ to describe the workings of the unconscious is simply unhelpful in providing ways to move beyond the mind–body distinction, which is what Lakoff and Johnson claim to be doing. We can reasonably infer something about the workings of the unconscious given what we observe from conscious, and even physical experience, but without fitting this into a broader view of reality, physical and otherwise, a certain prioritising of mind remains. This is related to the point made earlier about attempting to suddenly include embodiment in a theory; even the term ‘the embodied mind’, used liberally through the text, seems outdated, relying on the use of ‘embodied’ to describe a given, expressed as an object: the mind.

This highlights the rather uneasy position of cognitive science. Lakoff and Johnson effectively say that there is no mind, no independent entity that we can use this term to describe. Whilst it is fair to say that we impose a conceptual metaphor that helps us to make sense of our consciousness and the structures that do genuinely emerge from our consciousness, particularly language, a much deeper questioning is required if we are going to begin making inferences about the workings within us that give rise to this consciousness. It is simply not far reaching enough to continue to speak about

\(^{114}\) Ibid., p 12.
mind and simply add body to it, only later saying that these are not separate entities. If they are not separate entities, then there must be a better way of speaking, not about ‘them’, but an entirely different approach that perhaps does not require this division, even from the beginning, whilst acknowledging, of course, that it is a normal part of our functioning in this culture at this time to be speaking about ‘the mind’ and ‘the body’.

Lakoff and Johnson are not wholly unaware of this tension. They say that

our metaphors for mind conflict with what cognitive science has discovered. We conceptualize the mind metaphorically in terms of a container image schema defining a space that is inside the body and separate from it...this metaphor is so deeply engrained that it is hard to think about mind in any other way.\(^{115}\)

The language and metaphors of cognitive science indeed appear to preclude the possibility of moving beyond the engrained conception of mind. It is curious that Lakoff and Johnson remain so committed to this discipline, given their thorough understanding of the power of metaphor to shape our thoughts and concepts in ways of which we are unaware. Thus, Lakoff and Johnson reject the metaphor that views the mind or the human being as a computer, yet use all the language associated with it. They make much of the notion of gaining ‘evidence’ for the workings of the cognitive unconscious, and are aware of the skewing that theory provides in the highlighting of evidence, yet continue to trust their method. They even take neurocomputational modelling as a form of support for their views, and they do not question the relationship between brain and consciousness deeply enough. Thus,

\[ An \text{ embodied concept is a neural structure that is actually a part of, or makes use of, the sensorimotor system of our brains. Much of conceptual inference is, therefore, sensorimotor inference.}\(^{116}\)\]

The same problem emerges as in their earlier work, and in Johnson’s work, of mostly drawing inferences about embodiment from tangible, visually observable physical

\(^{115}\) Ibid., p 266.  
\(^{116}\) Ibid., p 20.
experience, in this latter case meaning that we can gain a good understanding of the way that physical interaction with and experience of our environments might shape many of our concepts without having any idea about other aspects of our experience, particularly the way we actually feel in the world, experience our bodies and minds through life cycles, health, illness and what meaning and understanding feels like.

Lakoff and Johnson touch briefly on this area in their discussion of the concept of the Self and their analysis of some of the metaphors we use to understand and speak about our ‘inner lives’. They reason that

The fact that we can make true statements about our inner lives using these metaphors suggests that these metaphors conform in significant ways to the structure of our inner lives as we experience them phenomenologically. These metaphors capture the logic of much of inner experience and characterize how we reason about it.\(^{117}\)

At the same time, they raise the very question that has been raised again and again in this chapter, and remains unanswered.

Does the metaphor fit a preexisting qualitative experience, or does the qualitative experience come from conceptualizing what we have done via that metaphor?\(^ {118}\)

References to ‘qualitative experience’ do not arise much in any of their works, however this is one of their most telling statements. Furthermore, the sustained focus on basic physical experiences that then extend into metaphorical conceptualising has skirted this issue in a handy way; with these basic physical experiences the issue of ‘qualitative experience’, or what it all actually ‘feels like’ does not really arise. Yet, introducing the notion of ‘inner life’ with reference to their discussion of the Self, implies a living, changing and dynamic environment that is internal to the individual, albeit at least at times metaphorically conceptualized and certainly tied directly to the life that is more obviously outside of the individual.

\(^{117}\) Ibid., p 288.

\(^{118}\) Ibid., p 289.
Ultimately Lakoff and Johnson tend generally to shy away from this aspect of human experience as they both seem to be concerned with retaining a certain objectivity and scientficity that does not rely too strongly on individual introspection. They do give a place to the ‘phenomenological level’ but their major concern is with creating an ‘embodied scientific realism’ based on the gathering of evidence from as many disciplines and methodologies as possible. They are not interested in the emergence of any absolute truth from this approach, but rather what they describe as stable scientific ‘results’. Interestingly, though, the examples they give for convergent evidence for the existence of conceptual metaphor are, as in their earlier work, all linguistically based forms of evidence. This provides compelling insight into the generation and change of linguistic understanding, even its relation to physical engagement in the world, but suggests also, in line with the criticisms made throughout this chapter, that the scope of their discussion is more limited than they realise. Thus, an essentially a linguistic inquiry into the human conceptual system is used to make such enormous statements as the following:

The universal embodied experiences that give rise to metaphors of Subject and Self produce in our cognitive unconscious a concept of a Subject, as an independent entity in no way dependent for its existence on the body. Because of those universal embodied experiences, this idea has arisen in many places spontaneously around the world.

And, yet, as commonplace and “natural” as this concept is, no such disembodied mind can exist. Whether you call it mind or Soul, anything that both thinks and is free-floating is a myth. It cannot exist.

Whilst this claim may be true in an embodied realistic sense, or even possibly in some absolute sense that we are not yet aware of, their theory does not deal with ontology to such a fundamental extent as to justify such a pronouncement. The point is not to repudiate their claim, but rather to show that Lakoff and Johnson might not acknowledge the limits of their project. Their theory might preserve an internal

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120 Ibid., p 89.
121 Ibid., p 563.
systematicity, as any good theory should, but it cannot be extended beyond the realms with which it explicitly deals.

In his earlier work, Johnson makes a commitment to the possibility of a kind of objectivity based on the notion of public, shared understanding, doing so in a considered and insightful way that makes sense of his project; to theorise human modes of conceptualising in such a way as to include our physical interactions with the world and the types of understanding these give rise to. The ‘reality’ of this is based on the fact that there are similarities in our modes of interacting with the world that are traceable to our common humanness; our bodies are generally similar and generally behave a certain way in their more obvious interactions with the physical environment. This can explain how it is possible that shared modes of understanding arise, but are not absolute and may also change. In the closing remarks of *The Body in the Mind*, he says:

> Objectivity consists, then, in taking up an appropriate publicly shared understanding or point of view. This involves rising above our personal prejudices, idiosyncratic views, and subjective representations.¹²²

This is a fair statement, given his project, but misses the point that this thesis will attempt to expand upon, namely that as humans conceptualising, thinking, responding, feeling and acting, for all the shared understanding that brings us together we also experience vast differences, not only between different cultures with broadly different conceptual schemes, but between individuals with histories varying infinitely in the details of experience. Thus it is possible that while we share many basic modes of understanding and experiencing, we also each create our own enormous set of unique, individual metaphors. This thesis will argue that is it these unique individual metaphors that position us in a far stronger sense, in relation to the details of our own lives and the understanding and experiences we come across, and further, that any theory that genuinely begins to move beyond the artificial divide between subject and object must be able to take account of the human experience of reality in its shared *and* individual expressions. This necessitates a much greater understanding of the

‘inner life’ mentioned by Lakoff and Johnson, and the way that inner life is formed by and formative of the more obvious ‘outer life’; our observable actions towards and reception of all that goes on around us in relation to various interpersonal realms, such a family, community, culture, humanness and nature.

Johnson, in addressing the fear of relativism that can encourage people to hold onto Objectivist viewpoints, says that

this fear of relativism is predicted upon a false assumption about the nature of objectivity – that either we have absolute foundations, or there are no foundations of any sort whatever.123

Similarly, as is evident when Johnson mentions the interdependence of human being and environment, it is worth exploring the possibilities for individuality and uniqueness in such a way that moves beyond the choice between the isolated, completely self-determining individual and the individual as embedded in the world in a deterministic sense. The meaning of inner experience is particularly important in this regard. Johnson’s view of imagination is particularly relevant here, as it offers the potential for beginning to understand the generation of inner experience in an individual and creative way, while preserving the important concept of shared imaginative structures. As this thesis progresses, and a process view is articulated, this view will be developed such that the concepts of processes and principles of functioning will become more relevant and useful than the concept of structures.

The problem that has been discussed through this chapter, culminating in the rather rudimentary expression of the difficulty of discussing ‘qualitative experience’ in relation to understanding, or more simply ‘feeling’, can begin to be differently addressed. Returning to the problem of the co-influence of understanding and experience, we might consider how the inner life and outer life of a human being influence and form one another. If our understanding is often metaphorical, and therefore involved with our imaginations, then it is interesting indeed to consider what this means for our experience, or how we might even begin to speak about experience

123 Ibid., p 200.
in a way that is not foundational. Lakoff and Johnson provide us with many tools to think about and expand upon these considerations, and the underlying difficulties, tensions and paradoxes that emerge from their theorising offer much potential in arguing for a fundamental ontological shift in our understanding. Of course, and this is one of their major insights as well as one reason why their theory can provide such a fruitful starting point, they also offer a very clear way of remaining aware that a shift in ontology is the application of a new ontological metaphor rather than an assumption that what will be described throughout this thesis is in any way more absolutely true or real than any of the theories that have been used and continue to be used in human understanding.

Obviously, it is important to acknowledge that many of the problems with their view that have been discussed through this chapter are related to the fact that the project of this theory is very different from their project, which, despite its apparently broad nature, seems to emerge from a commitment to understanding the human conceptual system. This is no doubt why their concern with something like the feeling of experience is not as great as it will prove to be in this thesis. Even so, their suggestion of the use of the ‘Experientialist Myth’ implies the need for a stronger account of experience than they provide.

It is worth mentioning at this point that the outlining of the ‘Objectivist Myth’ and the ‘Subjectivist Myth’ demonstrates the way that many current popular New Age ideas fit very clearly into the Subjectivist Myth and therefore may be seen as being in reaction to dominant modes of thinking rather than genuinely different or new. This reactive stance implies a tacit acceptance of the categories and concepts generated by Objectivism. Lakoff and Johnson’s description of the Subjectivist Myth, which they reasonably characterise with humour as ‘café phenomenology’ is worth quoting at length:

\[ \text{Meaning is private: Meaning is always a matter of what is meaningful and significant to a person. What an individual finds significant and what it means to him are matters of intuition, imagination, feeling and individual experience. What something means to one individual can never be fully known or communicated to anyone else.} \]
Experience is purely holistic: there is no natural structuring to our experience. Any structure that we or others place on our experience is completely artificial.

Meanings have no natural structure: Meaning to an individual is a matter of his private feelings, experiences, intuitions and values. These are purely holistic; they have no natural structure. Thus, meanings have no natural structure.

Context is unstructured: the context needed for understanding an utterance – the physical, cultural, personal, and interpersonal context – has no natural structure.

Meaning cannot be naturally or adequately represented: This is a consequence of the facts that meanings have no natural structure, that they can never be fully known or communicated to another person, and that the context needed to understand them is unstructured.124

This thesis will aim to speak about inner experience, and its relation to human life in the world, expanding upon the tools provided by Lakoff and Johnson without recourse to these assumptions of Subjectivism. The goal is to preserve the sense of inner experience as a gestalt, whilst clarifying that all experience does in fact have a ‘natural structure’ that relates to natural processes generally. This can only be thoroughly explained by a theoretical base in process philosophy, which will be discussed in the following chapters, prior to a discussion of the emergence of consciousness from preconscious natural processes.

124 George Lakoff and Mark Johnson, *Metaphors We Live By*, p 224.
Chapter Two  
Process Philosophy

In examining Lakoff and Johnson’s theories of understanding and experience, the preceding chapter identified problems inherent in their view that need to be addressed. The most fundamental is the need to more explicitly consider the metaphysical and ontological theory that can incorporate their understanding of metaphor, but can also expand their view towards a more satisfactory explanation of understanding and experience, or, as was also stated, the relationship between inner experience and ‘the world’. Such a metaphysics should provide a basic set of ideas that will support and remain consistent with more specific theories regarding change and development, and, further, ways of speaking about ‘the feeling of experience’. These more specific theories will be explored in later chapters, whilst the current chapter will attempt to justify the fundamental metaphysical orientation that can locate this thesis within a tradition. A set of basic categories consistent with this orientation will then be outlined in the following chapter. The goal is less to fully articulate a complete metaphysical system than to choose a basic orientation and point towards where this has been outlined in detail elsewhere.

The preceding chapter suggested that Lakoff and Johnson seem at times unaware of their underlying assumptions and argued that a shift at this level is necessary for moving beyond the problems with their theories. Whilst they explicitly state a general alignment with realism, with their specific approach moving beyond a purely physical realism to include social and personal reality, their explanations continue to be heavily focused on the physical realm. This tendency to revert to the physical was taken as evidence for the power of the ontological metaphors of entity and substance, highlighting the need for a shift in understanding at the level of ontology.

Problematic also is their recourse to ‘nature’ at various times in their discussion, which, whilst perhaps not problematic for them, marks a level of discussion below which their theory does not venture. Thus it was argued that the problems in comprehending the co-influence of understanding and experience need to be addressed at a basic level of reality, so that both consciousness and nature may be
understood within the same set of ideas. This may also be expressed as being able to understand and speak about the mental and the physical through a single theory.

It must be said also that given the aim of this thesis, to explore the relationship between inner life and outer situations, which must be strongly associated with the relationship between experience and understanding, and given Lakoff and Johnson’s suggestion that altering metaphors can change our reality, changing our worldview at the level of ontology suggests the possibility for a profound alteration in our experience. Thus, metaphysics and ontology are crucial not simply for the creation of a disembodied knowledge, but for their part in our actual experience of life. Arran Gare puts this particularly well:

In opposition to the idea of enquiry as the accumulation of knowledge conceived of as bits of information, the ultimate aim of all enquiry is taken to be understanding…Understanding, as the word implies, is a mode of being in the world by which the world becomes in some degree intelligible, a way of experiencing our world as at least a partially comprehensible reality.¹²⁵

**Process Philosophy**

Process philosophy is one metaphysical theory that holds promise for addressing all of the issues that have been raised thus far. Indeed, some may say that it is the only plausible metaphysical theory currently available. Defining the tradition of process philosophy is not entirely straightforward, not least because the thinkers that may be identified as a part of this tradition have generally not identified themselves with it. Added to this the fact that the concerns of process philosophy coincide with other theoretical approaches and schools, and that process philosophy itself contains a diversity of approaches, all of which means that the notion of a clearly defined tradition that progresses in a somewhat linear fashion simply does not seem to apply. The point of identifying a tradition however is not to prove the existence of a monolithic knowledge, but rather, in this case to show how theorists over time have

responded to similar concerns, influenced one another and shared similar underlying ontological commitments.

Before discussing various characterisations of this tradition, however, it is important to mention the widespread identification of the term ‘process philosophy’ with a single thinker, Alfred North Whitehead. Broadly, two camps appear to exist within process philosophy; those interested in interpreting and extending the work of Whitehead and those interested in identifying a much broader tradition in which Whitehead stands as one of a number of seminal figures. Indeed, from those who argue for the latter, as some of the few who have attempted systematic description of process philosophy, one gets the sense that the overidentification of process philosophy with Whitehead may stand in the way of its flourishing as a tradition. Limiting a tradition in this way serves to undermine the strength and inspiration that may be drawn from identifying a lineage and belonging to a community of thinkers with a rich, creative and diverse history.

Nicholas Rescher, George Lucas, Arran Gare and David Ray Griffin are all in some way interested in identifying process philosophy as a tradition. They vary in the way they systematise this tradition, although they refer to many of the same seminal thinkers. Their differences appear to be less regarding who should be included in the tradition, but rather how they relate to each other and how the emergence of their ideas might be traced.

David Ray Griffin, as editor of *Founders of Constructive Postmodern Philosophy*, uses both the term ‘panexperientialism’ along with the term in this title, ‘constructive postmodern philosophy’, to identify his grouping of somewhat similar thinkers as a ‘movement’ or tradition. The thinkers included in this volume, however, cross over with those generally clearly identified with process philosophy; Charles Sanders

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Peirce, Henri Bergson, William James, Alfred North Whitehead and Charles Hartshorne. It is not clear why Griffin opts for this name, given that these thinkers have already been grouped together under the umbrella of process philosophy. Griffin is something of a Whiteheadian, and admits that his grouping of other theorists is largely around their similarities to Whitehead: “I primarily take Whitehead’s position as the standpoint from which to characterize the commonalities.”

‘Panexperientialism’, as the name suggests, sees the “ultimate units of the world” as “experiencing events”, and points towards the fundamental nature of temporality. Griffin says that “This insistence on the fundamental reality of temporality is signalled by the fact that these constructive postmodern philosophies are generally called “process philosophies”.” We might wonder why then Griffin attempts to create a separate movement. This illustrates both the aforementioned problem of identifying too strongly with Whitehead, to whose work the term panexperientialism relates most strongly, and also to the question of at which level analysis begins. Whilst the phrase ‘ultimate units of the world’ suggests a metaphysical category it is not clear how this relates, as a fundamental category, to the ‘fundamental reality of temporality’. The quandary here may be better highlighted by Griffin’s statement as to what the constructive postmodernists agree upon:

From a (Whiteheadian) constructive postmodern perspective, the two fundamental flaws in modern philosophy have been an ontology based on a materialistic doctrine of nature and an epistemology based on a sensationist doctrine of perception.

To term the basic units of the world ‘experiencing events’ seems a strangely anthropomorphic ontological category, and in a sense also seems to employ terminology that is more suited to the realm of epistemology rather than ontology. Griffin’s characterisation points towards the extensive use by some thinkers, who can be squarely placed in the tradition of process philosophy, of experience as a basic epistemological category. To separate this more clearly from metaphysics and

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129 Ibid., p 3.
ontology can allow for the relationship between this area of theory and epistemology to be made more explicit. Thus, rather than showing that the functioning of reality or the world at levels other than human experience is similar to human experience, the obverse may be prioritised; that the functioning of human experience is fundamentally similar to all other kinds of functioning that make up the world.\(^{130}\) This is a beginning for a metaphysics that can, as intended, speak about nature and consciousness through similar terms.

Thus the aim is to acknowledge and in a sense continue the tradition of radical empiricism that has been articulated by some thinkers associated with process philosophy, such as William James\(^ {131}\) whilst initially prioritising broader theories of nature, or a more thoroughgoing metaphysical position. This should support the fulfilment of one of the aims of this thesis, to bring Lakoff and Johnson’s view of metaphor into an explicitly process approach, bringing their theory to greater fruition.

With a firm commitment to beginning with metaphysical categories, we can reconsider Griffin’s characterisation of constructive postmodernism as a response to the flawed ontology of modernism, the materialistic doctrine of nature. In providing an alternative to materialism, process philosophy thus offers an alternative to the substantialist metaphor, based on this modernist ontology, which continues to hold such a grip on our thinking, and therefore our understanding and experience. Positioning process philosophy as an alternative to modern materialism begins to draw out its conceptual roots, taking us well beyond an identification with Whitehead and back to the beginning of modern thinking, in response to which alternative ideas emerged. In fact, the characterisation of process philosophy as the result of dissatisfaction with mechanistic science and reductionism is one of the few points on which the aforementioned systematisers of process philosophy agree.

This is important with regard to the identification of a tradition, as so many of the problems that pervade all levels of Western society at this time, the antihumanism of late capitalism, the destruction of the natural environment, the loss of community and a general disaffection brought about by extreme individualism may all be directly

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\(^{130}\) Rescher makes this point in relation to a criticism of the anthropomorphism of Whitehead and indeed much of process philosophy generally, in *Process Metaphysics*, p 43.

related to the fundamental way of seeing things that was instituted by dualistic thinking and cemented by complete materialism. Elucidating a rival tradition that has existed alongside these dominant ideas for their entire duration can certainly give us cause for hope.

Positioning process philosophy in a broader philosophical history that is most focused on the past three centuries is a more fruitful starting point for a general characterisation of process philosophy than comparing the basic categories and contentions of those thinkers we might include. Some of these will be detailed further on in this chapter, but for the moment the development of this tradition will be briefly described through its relation to the history of dualism, a more thoroughgoing materialism and its alternative, idealism.

Hans Jonas captures the development of dualism and materialism particularly lucidly, discussing this through the alteration of ideas about reality in relation to perceptions of life and death as experienced through the body. Following a discussion of premodern thought as assuming the omnipresence of life, confused only by the “riddle of death”, he states:

Modern thought which began with the Renaissance is placed in exactly the opposite theoretic situation. Death is the natural thing, life the problem. From the physical sciences there spread over the conception of all existence an ontology whose model entity is pure material, stripped of all features of life. What at the animistic stage was not even discovered has in the meantime conquered the vision of reality, entirely ousting its counterpart. The tremendously enlarged universe of modern cosmology is conceived as a field of inanimate masses and forces which operate according to the laws of inertia and of quantitative distribution in space.

Whilst dualism has its conceptual roots in the much earlier Platonic philosophy, the dualism of modern thought is more extreme in its assumption of lifeless matter. The

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133 Ibid., p 9.
physical realm of particulars was seen by Plato as a lesser version of reality than the essential and incorporeal forms, but the essences nonetheless partook of the particulars. Modern dualism created a more complete divide, with its dead matter and the only possible correlate to this, a transcendent mind or soul.

Approaching matter and nature in this way did in certain respects broaden the understanding of the natural world, particularly in relation to the development of Newtonian mechanics, which Gare terms the "single greatest achievement of materialism". Such success paved the way for a complete determinism that eventually had no need for the invisible workings of God.

Accordingly, it is the existence of life within a mechanical universe which now calls for an explanation, and explanation has to be in terms of the lifeless.

A metaphysics of reductionism and the correlate ontology of materialism expresses itself also through the modernist epistemology of sense perception mentioned by Griffin. The mix of these commitments led to a particular kind of empiricism. As dualism took a more extreme form through modernism than was present in its Platonic origins, so did ideas about knowledge. Gare says of this logical empiricism:

> The status of this doctrine can be attributed to its concordance with the dominant metaphysical assumptions of society. These have their roots in Platonism but are more immediately grounded in the acceptance of a mechanistic conception of the world. The most important and most taken for granted assumption of logical empiricism is that the objects of knowledge must be found outside time and be free of all particular viewpoints.

> Logical empiricism can be understood as the effort to represent the objects of knowledge as eternal (true propositions or facts and the logical relations between them), whilst being consistent with the form of empiricism engendered

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by the mechanistic conception of the world (true propositions are those which have been confirmed directly or indirectly by sense impressions).\footnote{Arran Gare, \textit{Nihilism Inc.}, p 285.}

Thus the mechanistic and reductionist view of nature and the epistemology that went along with this resulted in the radical separation of observer and observed, subject and object and whilst dualism in itself was not new, this version was much more all encompassing than its precursor in ancient Greek philosophy. Such dualism was epitomised in the philosophy of Descartes\footnote{Arran Gare, “Process Philosophy and the Emergent Theory of Mind”, p 4.} and continues to form the basis of the worldview of Western society, as evinced in the discussion of the Objectivist Myth by Lakoff and Johnson.

However, it is far too simplistic to characterise dualistic thinking through its formal philosophical development without noting the tangible role it has played in the development of religion in the West. Seen from this broader perspective we can agree with Jonas in his contention that “the rise and long ascendency of dualism are among the most decisive events in the mental history of the race”.\footnote{Hans Jonas, \textit{The Phenomenon of Life}, p 13.} He says that “dualism continued to drain the spiritual elements off the physical realm.”\footnote{Ibid.} As philosophers rather than theologians we may tend to emphasise the preoccupation with looking outward in the development of extreme dualism, the observation of the physical world in systematic detail that found its most rigorous expression in modern science. However Jonas, importantly, calls to our attention the development of the obverse through religion that is perhaps even more important to the rise of dualism.

The discovery of the “self,” made first in earnest (for the West) in the Orphic religion and culminating in the Christian and Gnostic conception of an entirely nonmundane inwardness in man, had a curiously polarizing effect on the general picture of reality: the very counterpart to the increasingly exclusive stress laid on the \textit{human} soul, on its inner life and its incommensurability with anything in nature. The fateful divorce, stretched to the point of complete foreignness which
left nothing in common between the parted members, henceforth qualified them both by this mutual exclusion.\textsuperscript{140}

Thus, this dualism laid the groundwork for the development of material monism, a form of postdualism.

Thus the splitting of reality into self and world, inner and outer existence, mind and nature, long sanctioned by religious doctrine, prepared the ground for the postdualistic successors.\textsuperscript{141}

Postdualism may take the form of either modern materialism or modern idealism, and both of these positions rely on the prior development of dualism. This, says Jonas, attests to the partial and inadequate nature of both positions; “they both presuppose the ontological polarization which dualism had generated, and either takes its stand in one of the two poles, to comprehend from this vantage point the whole of reality.”\textsuperscript{142}

Put very simply, choosing between the subject and object, or between consciousness and nature relies on the existing division. At the same time, we cannot ignore the history of our own thinking, the development of dualism, the reign of materialism and the alternative voice of idealism. Fully facing these aspects of our history is important not simply because they happened, but because no matter how much or little value we place on the perspective of dualism and either of the postdualisms, those who articulated them did so with good reason.

There is no returning to [the integral monism of prehistory]: dualism had not been an arbitrary invention, for the two-ness which it asserts is grounded in reality itself. A new, integral, i.e., philosophical monism cannot undo the polarity: it must absorb it into a higher unity of existence from which the opposites issue as faces of its being or phases of its becoming. It must take up the problems which originally gave rise to dualism.\textsuperscript{143}

\textsuperscript{140} Ibid., p 13-14.  
\textsuperscript{141} Ibid., p 14.  
\textsuperscript{142} Ibid.  
\textsuperscript{143} Ibid., p 16-17
This is a very important point; it clarifies the need for moving beyond the division of subject and object without discounting the possibility of observing duality at some level and in relation to some perspectives, whilst also elucidating, albeit in a simplistic way, that idealism, or subjectivism, may be as flawed as the objectivism against which it reacts. Importantly, also, we can begin to think about polarities such as the mental and physical as relevant to some ways of understanding the world and our experience, whilst retaining a broader commitment to a theory that can account for them both; there are levels of understanding at which such duality is appropriate and more fundamental levels at which it is not applicable.

Those theories that have positioned themselves against scientific materialism all in some way take individual or social consciousness as primary. Yet they also exhibit a variety of views, being divided along such lines as whether consciousness is individual or transcendental, cultural or spiritual, contemplative or based in active engagement in the world. Gare positions process philosophy in relation to the reasonably coherent tradition of materialism, and this less coherent tradition that opposes it, adding that:

Finally, there is a smaller tradition of thought that acknowledges the achievements of so-called ‘idealists’ and the inconsistency of the way they have construed consciousness with the way the physical world is constructed by the mainstream of scientists, but who still wish to take nature or the physical world rather than consciousness as their primary reference point for making the world intelligible.

By characterising the theoretical impetus for process philosophy in this way, Gare justifies the perspective of Schelling as perhaps the major figurehead for process philosophy, recognising also that Schelling was developing the ideas of Herder and Fichte. He maintains that Schelling is generally wrongly characterised as an idealist, an interpretation that fails to appreciate his efforts to move beyond the distinction of subject and object; indeed Gare reports Schelling’s characterisation of his own

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145 Ibid., p 4
philosophy as “neither materialism nor spiritualism, neither realism nor idealism.”\textsuperscript{146} Thus,

Arguing for a transcendence of this opposition, he argued that the self-conscious ‘I’ needs to be explained, ultimately as the product and highest potentiality of nature. Transcendental philosophy therefore needs to be complemented by a philosophy of nature.\textsuperscript{147}

A theory that can accomplish the explanation of consciousness from nature is obviously deeply involved with the question of development; if consciousness is of nature, wholly dependent upon and explainable through processes that are characteristic of nature, yet not completely reducible to these processes, then obviously explanation must be concerned with how consciousness came to be. The concept of emergence is the key to comprehending this, and Gare suggests organising process philosophy around “the effort to provide the basis for a theory of emergence”.\textsuperscript{148} Put simply, theorising the becoming of consciousness, or self-consciousness, from nature must involve something other than mechanistic and reductionist conceptions of causality. Therefore, the way that consciousness developed out of nature, and continues to be connected to nature, must be essentially similar, in principle, to other observable processes of nature. The concept of emergence is the most general way of characterising this; as a causal relationship that is not based on simple linear relationships and through which one phenomenon cannot simply be reduced to another. Whilst general, this explanation is absolutely central to even beginning to conceptualise the possibility of moving beyond the complete division of subject and object, or nature and consciousness; indeed it may be seen as contained within the intention to move beyond dualism.

The concept of emergence moves away from the mechanistic view that can only account for the world, and, for that matter, knowledge of the world, as essentially static and unchanging, and points to another key characterisation of process philosophy; it is, in its attempts to find a unified explanation of consciousness and

\textsuperscript{146} Ibid., p 7.
\textsuperscript{147} Ibid., p 6.
\textsuperscript{148} Ibid., p 4.
nature that looks first to nature, an evolutionary cosmology. Being explicit about this allows us to make the link again to Schelling of many of those thinkers mentioned as central to process philosophy. Gare sees Schelling’s philosophy as the precursor to the evolutionary cosmologies of quite a list of process thinkers: Frederick Engels, Herbert Spencer, C.S. Peirce, Henri Bergson, Aleksandr Bogdanov, Samuel Alexander, Lloyd Morgan, Alfred North Whitehead, and Ludwig von Bertalanffy.149

The intention of the preceding discussion is not to evaluate these thinkers and their links to Schelling in detail, but rather to introduce the idea that systematising process philosophy in this way, as having grown out of efforts to conceive of the relationship between nature and consciousness in a particular way, that moves beyond dualism, provides the tradition with a core intention around which to organise itself. This makes for a surprisingly coherent and expansive view, given the difficulty that process philosophy has had in identifying itself, particularly by those concerned with the tradition as more than an identification with Whitehead. The fact that this intention emphasises the concerns of process philosophy with theories of evolution highlights in a historical way that process philosophy is first and foremost concerned with change. Whilst modern science can account for mechanistic causal relations between states, it cannot account for change in any broader way, or describe change more fully than this. Efforts to understand change as observed in nature and interpreted through evolution led to some of the evolutionary cosmologies associated with process philosophy. Such efforts have occurred during the entire reign of materialism, always attempting to describe phenomena that mechanism could not even begin to understand. This supports the realisation that the substantialist metaphor was never going to explain the world and human experience in its entirety; its domination is out of proportion to what its explanatory power ever was, and for as long as it has dominated, there have been thinkers who fully realised its limitations and searched for something better.

A part of the reason for interpreting the tradition of process philosophy in this way is not only to encourage its flourishing and the sense of community and history this might engender, but also to allow for its expansion, or at least the acceptance of a

149 Ibid., p 7.
variety of thinkers as compatible with it. Thus, through their relationship to
Schelling’s philosophy, we may consider the relationship to a process metaphysics of
developments in both physics and biology, as well as “philosophers and cultural
theorists reacting against Hegelian and neo-Kantian ‘idealism’ and the ‘idealist’
tendencies in Husserl.” Gare argues for an even broader list of thinkers “directly
and indirectly…strongly influenced by Schelling”, including Marx, Kierkegaard,
Nietzsche, Freud, Heidegger, Bakhtin and Deleuze. Thus he says that

Appreciating the roots of all these thinkers and the schools of thought they
inspired in Schelling’s philosophy enables their achievements to be appreciated
as basically consistent with and possible contributions to the development of
process metaphysics.

Whilst it is well beyond the possibilities for and aims of this thesis to argue for such
expansion, it is nonetheless important to acknowledge that this has been well argued
for, and that broadening the tradition of process philosophy in a thorough and
consistent way is at the very least possible. Furthermore, attending to this possibility
at this early stage sets the scene for the inclusion of theorists in later chapters who
would generally not term themselves process philosophers, but whose theories may
certainly be consistent with its metaphysical approach. This will serve to continually
affirm the importance of being theoretically explicit and consistent about one’s
metaphysical approach.

The interpretation of the tradition of process philosophy has thus far relied largely on
Gare’s interpretation, although it is consistent with Jonas’ argument for the need for
an alternative to postdualism, rather than only materialism. It serves also to respond to
criticisms made by numerous systematisers of process philosophy regarding the
tendency to identify with Whitehead. Nonetheless, to strengthen this position, it is
worth addressing Lucas’ schematisation of process philosophy, in particular issues
relating to the links between process philosophy and idealism, between process

150 Ibid.
151 Ibid.
152 Ibid.
philosophy and pragmatism, and the problem of scientificity, to see whether orienting process philosophy as suggested provides any further clarification.

Lucas opts for identifying various schools within process philosophy, in an effort to clarify ambiguities in understanding the tradition. His method uses both an *a priori* and historical approach; “I attempt to develop a set of inclusive criteria defining process philosophy, as these criteria emerge in its historical genesis and development.”153 He identifies four major schools as well as a number of ‘bridge movements’. Process philosophy is defined according to three general criteria; (1) a primary ontology of events or occasions rather than of static being, (2) a form of teleology that includes discrete entities and relations placing them in larger systems, thus involving both pluralism and holism and (3) “some sort of immanent pattern or principle of organization which is generally exhibited in all processes of change”.154 Schools are defined according to their relative emphases on these criteria and features that arise from these basic commitments, such as an emphasis on time, on freedom and creativity, and “the development of a concept of nature in which the “bifurcation” of nature into mind and matter, subject and object, is overcome.”155 Thus, even though his approach is historical, this starting point prioritises the basic categories over the intention of overcoming the ‘bifurcation of nature’. I will attempt to show that it may be simpler and more fruitful to characterise this intention as the defining historical intention, and prioritise it over the comparison of basic categories, as the best means of identifying the tradition.

The first school that Lucas identifies, perhaps to address early on the position of Whitehead within the broader tradition, he terms ‘Process Rationalism’, or, also, ‘The Whiteheadian School’. The tendency to associate process philosophy with Whitehead leads to the tendency to identify the fundamental position of ‘becoming’ and ‘temporalism’ with his work, and Lucas maintains that these are decidedly not innovations of Whitehead, but rather attributes to him the concept of ‘epochalism’ and the doctrine of prehension.156 Lucas characterises this school as more influenced by

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154 Ibid., p 10.
155 Ibid.
156 Prehension summarises the concept of forms of perception other than sensory, and is implicit in the term ‘panexperientialism’, mentioned earlier.
developments in physics, with an emphasis on relativity theory, than by evolutionary biology. Related to this, he claims, is the emphasis on metaphysical systematicity and consistency; “this cosmology is highly rationalistic”, which he finds “reminiscent of the pre-Kantian tradition of rationalism, as exhibited, for example, by Spinoza and Leibniz.”157 This is in contrast to “the more descriptive, intuitive and non-systematic methods practiced by several earlier process philosophers.”158 Lucas identifies a “modified Platonic realism” in Whitehead’s philosophy, but finds this less remarkable, or particular to this school than the “Leibnizian substitution of a single species of actual entities as events, in place of the chaotic ontological plethora of entities introduced through the British neo-realist “sense data” theory.”159 The characteristic that most defines the Process Rationalist school, in Lucas’ opinion, is the ‘philosophy of organism’, that accounts for both internal relatedness and temporal asymmetry, in such a way as to account for both causality and creative freedom. Thus, he summarises the process rationalist approach:

To some degree, doctrines of organism, creativity, and freedom are combined with the broader commitment to temporalism and the articulation of an event (rather than a substance) metaphysics – all pursued in a rigorous and systematic manner which might best be described as “rationalist cosmologies”.

For the moment, it is worth noting that in this final description, the most defining features seem to be the doctrine of organism as a way of resolving causality and freedom, and the emphasis on rational systematicity. This will become relevant through an overall assessment of Lucas’ schematisation.

Having dealt initially with the problem of positioning Whitehead and those similar to him, Lucas moves on to describe the school of ‘Evolutionary Cosmology’, as by far the most significant and revealing episode in the genesis of the larger process tradition. The history of this distinctive school spans, and in a very real

157 Ibid.
158 Ibid.
159 Ibid., p 30.
160 Ibid., p 31.
sense is, the history of modern speculative metaphysics in the process tradition in Europe and America.\footnote{161}

Lucas cites this as the environment out of which Hegel produced his “dialectical concept of human historical and cultural evolution”, and finds its strong influence in pragmatists such as C.S. Peirce and John Fiske, along with, to a lesser degree, William James and John Dewey.\footnote{162} Furthermore, “the influence of this school, as mediated through Bergson, C. Lloyd Morgan, Jan Smuts, and Samuel Alexander, forms the background for the contemporary speculation of Whitehead, Hartshorne, Eddington, Heisenberg, and others in the school of process rationalism.”\footnote{163}

Evolutionary cosmologists are concerned with “the role of specific forms of causation in the process of evolutionary development”, and the philosophical and theological implications of this.\footnote{164} Lucas characterises thinkers of this school as generally stressing “the underlying unity of evolutionary process”,\footnote{165} in contrast to Whitehead’s pluralism. To articulate and be able to in a sense reformulate Lucas’ interpretation more in line with Gare’s, it is worth quoting at length some of his points regarding differences between the two schools that have been outlined thus far.

Contemplating their present image in the mirror of history, process philosophers cannot but help but notice that they are contemporary bearers of a longstanding metaphysical tradition. The continuation of themes articulated by Diderot, Lamarck and their romantic contemporaries to the present – including interconnectedness or “organism”, the teleological order of nature, freedom, novelty, and progress – are not only impressive but embarrassing precisely for their historical continuity. Those in the school of process rationalism, for example, pride themselves on the alleged empirical bases, as well as the internal coherence and logical rigor of their speculations. The historical grounding of their cherished themes in a tradition which is frequently portrayed as anti-

\footnotesize{\textsuperscript{161} Ibid.\textsuperscript{162} Ibid., p 54.\textsuperscript{163} Ibid.\textsuperscript{164} Ibid., p 55.\textsuperscript{165} Ibid., p 58.}
empirical, anti-intellectual or anti-rational, metaphorical and romantically and fancifully descriptive, constitutes something of a scandal.\textsuperscript{166}

Thus, it seems that Lucas distinguishes Process Rationalism from Evolutionary Cosmology on the grounds of the unwillingness of the rationalist to be associated with the ‘anti-rational’, as much as for any difference in their actual theories. Thus:

\begin{quote}
The major differences between the two schools, in sum, are a tendency in evolutionary cosmologies toward ontological (as well as epistemological) monism, and a stubborn (and perhaps unwarranted) faith in the unity, progress, and convergence of evolution itself. These are hardly irreducible differences; indeed, in many respects, these are disagreements among friendly colleagues. But these differences do give a certain credence to the demand that the rationalist school be judged independently, on the basis of its unique contribution to the larger process tradition. The differences result from rather different assumptions about the role of scientific investigation and explanation, as well as from the divergent origins of the rationalist school in contemporary physical and mathematical, rather than in eighteenth- and nineteenth-century biological, sciences.\textsuperscript{167}
\end{quote}

The points made by Lucas to justify his definition of these two schools of process philosophy bring up a number of issues. He is clear that the process rationalists have emerged from the evolutionary cosmologists, largely because he seems to be saying that the entire history of process philosophy emerges from the school of evolutionary cosmology as the oldest identifiable school. The two major theoretical differences identified are those between and a pluralism and a monism, and between an epochalism and a faith in evolution’s unity and progress. The latter of these two differences appears to be tied in with the former. Yet an even bigger and apparently less surmountable difference between the two approaches outlined might lie in their respective ideas about and commitments to rationality and scientific forms of inquiry.

\textsuperscript{166} Ibid., p 57.
\textsuperscript{167} Ibid., p 59.
The first and most obvious point to be drawn from comparing Lucas’ characterisation thus far with Gare’s is that Lucas, in identifying the history of process philosophy, and the particular school of evolutionary cosmology with a Romantic subjectivism is expressing a different understanding of its origins than Gare. Indeed, Lucas’ characterisation is essentially of one kind of idealist reaction to materialism: “The school of evolutionary cosmology had its birth in the Romantic reaction to Newtonian-Laplacian science”. 168 Such an identification seems a rather simplified analysis and to perhaps confuse cultural and philosophical romanticism, a matter that may be clarified by turning to Schelling’s work. Whilst it may be the case that, in his Naturphilosophie, “Schelling adopts the idea from the early Romantic thinkers Friedrich Schlegel and Novalis…that art is the route to an understanding of what cannot appear as an object of knowledge”, 169 and right through his career resists philosophy as being capable of providing an absolute, enclosed system that fully describes reality, both the intention behind his work, and the systematicity with which he approaches it belie an easy identification with the subjective, ideal and anti-rational. This is all also in problematic relationship with the idealised reason that emerges in the work of Hegel and is generally seen as relating to Schelling’s work:

Schelling has usually been understood as providing the transitional ‘objective idealist’ link between Fichte and Hegel. By regarding Hegel’s system as the culmination of German Idealism this interpretation fails to do justice to Schelling’s real philosophical insights. 170

Interestingly, the third school that Lucas identifies as belonging to the process tradition is that of Hegelian Idealism, justifying its inclusion by differentiating it from “those familiar forms of idealism – subjective and monistic – [that] are widely perceived as hostile to a process interpretation of nature, owing to the decidedly inferior status of the flux of natural forms as “external” (i.e., non-mental or non-spiritual) phenomena.” 171 Lucas, instead, points out the affinities between Hegel’s development of an ‘organic teleology’, suggesting that Hegel’s philosophy of nature,

168 Ibid., p 58.
170 Ibid.
which is often underemphasised, is integral rather than peripheral to his entire system. He suggests also that “Hegel intended in his use of dialectic a perceptual, interactive process akin to what Whitehead intended by the term “concrescence”. “\(^{172}\) Whilst Lucas refers to the influence of Schelling, it is not entirely clear how he positions him in relation to process philosophy generally:

"We must remind ourselves, for example, that Hegel was a harsh critic of German-French romanticism and its accompanying Naturphilosophie, as advocated by Schelling and F. Schlegel. This, together with the paucity of empirical evidence in its support, accounts for Hegel’s decisive rejection in the early nineteenth century of Lamarckian-romanticist theories of natural evolution and progressivism. Yet Hegel adapted those views to firmer empirical ground in the process of interpreting historical and cultural evolution, and so developed the first clear concept of “historical process”.\(^{173}\)

Gare, along with Lucas, appears to be of the view that some forms of idealism are amenable to a reinterpretation more in line with a process metaphysics. For instance, a process metaphysics might support a general rethinking of Hegel away from the tendency towards the eternal whilst maintaining the richness of his interpretations of culture and history.\(^{174}\) Two points may further clarify the relationship between Hegelian idealism and process philosophy. Firstly, if we organise process philosophy around the intention to move beyond the subjective and objective, then we can see why Hegel relates so strongly to process philosophy, whilst still acknowledging his choice, ultimately, of the ideal over the material. Secondly, by seeing Hegel as developing Schelling’s Naturphilosophie we can reinterpret his relationship to Whitehead by the similarity of both influence and aim. Gare says

"While Whitehead in Process and Reality defined his work in relation to philosophers such as Descartes, Locke and Hume, his originality came from developing the tradition of Naturphilosophie.\(^{175}\)"

\(^{172}\) Ibid., p 104.
\(^{173}\) Ibid., p 100-101.
\(^{175}\) Ibid., p 7-8.
Thus, Gare’s interpretation can clarify the situation, and perhaps simplify unnecessary complication by finding the commonalities between Whitehead and Hegel in their development of the same tradition, indeed with the similar aims of an increased logical rigour and internal systematicity. Gare’s interpretation makes for a more continuous tradition that can be seen as developing in various ways, perhaps without such a break that places Whitehead and others like him in a separate school than what is, in fact, their history. Again, this is clarified with reference to Schelling:

The core of Whitehead’s metaphysics can be taken as an effort to defend speculative philosophy and to reformulate an organic view of the world to accord with these developments in logic and mathematics, thereby making it a more rigorous and defensible position. He acknowledged that one of his main concerns in *Process and Reality* was to rescue the type of thought exemplified by Bergson, William James and John Dewey from the charge of anti-intellectualism… The result was a philosophy with striking resemblances to Schelling’s philosophy, particularly in his analysis of the relation between subject and object and his theology, but which offers a far more detailed analysis of the proto-mental and proto-material aspects of process and of the relationship between process, logic and mathematics.176

Whilst the importance Lucas places on identifying within the process tradition differing levels of concern with logical rigour and systematicity is understandable, this might be better expressed as the issues with which any philosophical theory that attempts to move beyond the dualism of subject and object must contend. Different thinkers within this tradition have dealt with this in different ways, but if the tradition is organised around this intended move, the problem of systematicity, or ‘scientificity’ is absolutely central to the tradition as a whole. Indeed, this point shows the absoluteness that is common to both idealism and materialism, both of which posit that perception, either of thought or the physical world, is clear and undistorted and may be taken as given. It is built into the intention of process philosophy to question this and find some way of being both systematic and internally consistent, as well as accounting for the positioning of the observer or theorist. The difficulty of this is what

176 Ibid., p 8.
can often lead to idealism, illuminating again that the more reliable path is to continue to look first to nature rather than human consciousness. Indeed, there is an irony in Whitehead’s commitment to scientifcity that resulted in the creation of a notoriously complex metaphysical system. This may be due, at least in part, to his taking human experience as paradigmatic. This issue of scientifcity will be addressed again following the discussion of the fourth distinct school suggested by Lucas, Pragmatism and Realism.

It was mentioned earlier that all the systematisers of process philosophy considered included James and Peirce as seminal process thinkers. John Dewey is also often included, and Lucas notes that the influence of all three, as the “primary triad” of American pragmatism, on Whitehead and Hartshorne can lead to a view of pragmatism as a precursor to contemporary process philosophy. Lucas disagrees with this, maintaining that

The formal concerns of pragmatism are not especially germane to process philosophy, and the critical problems and weaknesses of pragmatism are largely irrelevant to the metaphysics of process itself.178

Lucas mentions that pragmatism is theoretically compatible with a number of metaphysical systems, including subjective idealism and absolute idealism, part of the source of confusion. He therefore clarifies the situation in the following way:

Thus, it is my impression that pragmatists such as Peirce and Fiske have proved influential in the process tradition not because of their pragmatism, but because of their more explicit development of evolutionary cosmologies. Pragmatists such as James and Dewey who are not evolutionary cosmologists, are properly subsumed as process philosophers – not because of their pragmatism or instrumentalism, but due to their advocacy of varieties of metaphysical realism. Reference to pragmatism in the historical development of the process tradition

178 Ibid.
thus masks the contributions of two distinct schools, neither bearing any necessary systematic relationship to pragmatism.\textsuperscript{179}

Whilst Lucas certainly draws out the complexity of interrelations amongst various theories and philosophers, the issues that divide both between and within schools can appear complicated enough that we might question the worth of defining these various schools in the first place. There is no doubt that a variety of approaches exist within the tradition of process philosophy, and some philosophers have delved more deeply into metaphysics than others. Furthermore, even though some pragmatists may not be classifiable as evolutionary cosmologists, their work nonetheless rests on developments in evolutionary thinking; Lucas admits, and acknowledges the confusion this creates, that

Pragmatism is unmistakably a post-Darwinian philosophy. Its empiricism is a biologically oriented empiricism: “experience” itself progressively comes to be interpreted as involving a living organism and its world.\textsuperscript{180}

Not being metaphysically based, pragmatism indeed may not be characterisable as a process philosophy, but the concerns of pragmatism may be well served by a process metaphysics, despite being compatible with other metaphysical approaches.\textsuperscript{181} Some, such as Marcus P. Ford in fact characterise James’ work as incorporating a process metaphysics in his particular view of experience.\textsuperscript{182} Lucas would disagree and prefers to characterise James as a metaphysical realist. He says that

The metaphysical foundations of commonsense realism do not include specific commitments to process and change so much as to ontological pluralism, epistemological monism, Platonism or “ontological realism” and a denial of internal relatedness. Finally, the historical development and demise of realism illustrate the conceptual incoherence of these views.\textsuperscript{183}

\textsuperscript{179} Ibid., p 138-9.
\textsuperscript{180} Ibid., p 137.
\textsuperscript{181} Ibid., p 143.
\textsuperscript{183} George R. Lucas, \textit{The Genesis of Modern Process Thought}, p 143.
That disagreement exists over the characterisation of James’ position with regard to metaphysics serves as a fine example through which to evaluate the different methods by which Lucas and Gare systematise process philosophy. Lucas’ characterisation of James as a metaphysical realist may be reasonable given James’ view of consciousness existing only as a function in relation to a basic substance, and the influence of this view on the development of new realism.184 Yet the situation is more complex. James proposed a neutral monism of ‘pure experience’, which, although unfortunately expressed as the “basic stuff or material in the world”,185 belies a simple identification with either the mental or material. Andrew Reck mentions that in A Pluralistic Universe James “cited and elucidated in a separate appendix the basic principles of Peirce’s cosmogonic philosophy, explicitly as an expression of the new philosophy of process and creativity that was in the making in the early twentieth century.”186 Yet Reck also mentions that James failed to systematically present his ideas. Thus, James’ work may be aligned with the tradition of process philosophy, as it is by most systematisers of process philosophy; even if his theory falls short of a complete and systematic process metaphysics it may be interpreted as embodying the intention to move beyond the dualism of subject and object.

Interpreting the work of James with reference to this intention can clarify the relationship to process philosophy of both pragmatism and realism. Indeed, Lucas’ suggestion that James and Dewey be considered process philosophers on the basis of their advocacy of varieties of metaphysical realism, rather than as pragmatists seems mistaken. This returns us to the entire history of speculative philosophy, the development of dualism, the postdualisms of materialism and idealism and the need to move beyond both, discussed with reference to Jonas. As is also evident in Reck’s overview of speculative philosophy, the classical realism of Plato marked the beginning of dualism, and realisms, both classical and contemporary tend to result in dualisms, either of the mental and material or of epistemology and ontology, or both. Indeed, Platonic realism, in which particulars are derivative of the Forms implies the development of idealism, whilst Aristotelian realism, emphasising the primacy of substance and scientificity implies the development of materialism. Hence, the

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185 Ibid., p 124-5.
186 Ibid., p 201.
development of theories that uphold one side of dualism, and the development of process philosophy as an alternative that moves beyond both.

Conversely, the concern of pragmatism with the interrelation of theory and practice presents a method of inquiry very much suited to the intention of process philosophy. This concern highlights the provisional nature of metaphysical and ontological speculation acknowledged in process philosophy. One of the great promises of process philosophy lies in its willingness to engage with the creation of systematic theory without positing absolute foundations. This, again, is present in the work of Schelling, and integral to the move beyond subject and object. Theory must always be both highly internally consistent and ultimately provisional; “Before any enquiry we are always already engaged in a world shared with others which is already partially understood, and this understanding of the world and its limits are presupposed by such enquiry.”187 Theory is one kind of engagement in the world from which numerous metaphors emerge and influence our other kinds of engagement with the world. In this sense, the orientation of pragmatism is, contrary to Lucas’ opinion, deeply relevant to process philosophy.

This discussion provides for an evaluation of the position of Lakoff and Johnson. Their theory of metaphor centralises interpretation in both our experience and understanding of the world, yet their recourse to critical realism limits their theory to epistemology, an underlying commitment that renders them unable to account for experience. This highlights also the problem of simply adding a belief in the fundamental reality of social and personal worlds to the belief in material reality upheld by critical realism and explains why their ideas ultimately do not move beyond dualism, despite their intention to do so. This invokes once again the need for a basic ontological shift that takes nature as primary, accounting for the emergence of consciousness from nature. Interpretation, in this context, must be described as an observable, fundamental process of both nature and consciousness.

Whilst Lucas draws out a level of detail in the interrelations amongst different thinkers that few other systematisers of process philosophy approach, his delineation

187 Ibid., p 310.
of various schools ultimately seems so artificially divisive as to be of questionable use. The problems and complexities arising from his approach appear to be simplified and resolved by uniting the entire tradition around a single intention, as Gare proposes. Lucas’ work, however, does help to draw out the uneasy and changing relationship that process philosophy has had with the need to be scientific and thorough. The use of the term ‘scientific’ is in many ways unfortunate as it seems to uphold the particular methodology of modern science as an ultimate measure of worth, obscuring the underlying assumptions of this methodology and deflecting attention from the broader view that to be scientific is to be aware of and consistent with basic metaphysical assumptions at whichever level of inquiry or detail one is working. Thus, Gare remarks

> The form of rationality involved in metaphysics is no different from, and is inseparable from, the form of rationality involved in particular sciences. In each case, comprehension is developed through the elaboration and articulation into conceptual frameworks of metaphors in competition with or in relationship to other metaphors in the struggle to understand the world and its anomalies.188

The scientificity of a theory is its internal consistency, and basic metaphysical categories provide the starting point. However, as also mentioned, the need to be scientific, or systematic, must be reconciled with an ability to account for the position of the observer or theorist. Thus, the following chapter will consider dialectics, along with outlining basic concepts and categories for this thesis.

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188 Arran Gare, *Nihilism Inc.*, p 309.
Chapter Three  
Process Metaphysics

In a discussion of process metaphysics, Gare reminds us, importantly, that much of the work of formulating categories has already been done.

Peirce, Bergson, Whitehead and those influenced by them have already done much to conceptualize the world as a process of creative becoming, and they have strongly influenced the sciences. Concepts proposed by these philosophers have been selected and refined through their applications within science. Process philosophers today are participating in the on-going development and refinement of concepts which have already proved themselves in a number of areas.  

Interestingly, though, whilst some developments in the sciences, particularly in philosophical biology, draw on concepts of process philosophy, there is often not the specific acknowledgment and alignment with the tradition. This is true for theorists whose work will be discussed in the following chapter, namely Valerie Ahl, T.F.H Allen, Stanley Salthe and Howard Pattee, all major proponents of hierarchy theory, as well as the biosemioticians, specifically, in relation to this thesis, Jesper Hoffmeyer, Claus Emmeche and Jay Lemke. This may be at least partly related to the challenge of identifying the process tradition discussed in the previous chapter. Yet even though the tradition was identified as being organised primarily around an intention, that of moving beyond the division of subject and object, rather than with a set of basic categories and contentions, the explicit awareness of underlying metaphysical assumptions remains vital to any theorising. It is therefore useful both to align these theorists with the tradition of process philosophy, defined first and foremost by its intention, and to elucidate basic metaphysical assumptions with which their theories might be compatible.

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This thesis seeks to align itself with process philosophy first and foremost through its intention to move beyond the subject and object, to find a way of understanding both nature and consciousness through the same set of ideas. In keeping with the need for consistency and explicit recognition of underlying assumptions, the concepts and categories that will be used throughout this thesis will be addressed as fully as possible in this chapter. Importantly though, this thesis does not seek to create a thoroughgoing metaphysical system, nor does it seek to engage in minute detail the metaphysical system of any one thinker within the process tradition. Rather, it seeks to justify basic ideas and express them in as straightforward a manner as possible, taking cues and inspiration but also diverging from the work of Nicholas Rescher and Arran Gare, who have both approached process metaphysics from a perspective of thoroughness and simplicity, Rescher through his overview of process metaphysics and Gare through the creation of a metaphysical scheme. The work of David Bohm is also drawn upon, particularly in considering the causal concepts entailed in the categories.

It was mentioned in the previous chapter that process philosophy is currently the only field of theorising that generates possible solutions to the historical intention of moving beyond subject and object. It might be said, then, that for the moment and within current limitations of thinking and theory, the approach of process philosophy is contained within the intention. Thus, even attempting the move implies a general approach and gives rise to certain kinds of ideas that are identified with process thinking. This is no doubt why, even without a solid tradition that has been explicitly identified through time, the concepts and theories that have emerged have so much in common.

More important than the specifics that different theories have in common, however, is the way that process philosophy approaches questions and what it expects from its answers. Whilst process philosophy takes a committed and optimistic stance with regard to the value and use of metaphysics, it does not posit absolute foundations or totalising perceptions of knowledge. Rescher sums this up: “For that philosophy of process is also a philosophy in process. It is not a doctrinal framework of fixed conceptual stability but a changing and evolving approach whose nature must itself be
understood in processual terms.” 190 With regard to knowledge he says that “Idea formation is a salient and characteristic capacity of intelligent beings, and experience – that is to say, the interaction between minds and nature – is the pivotal mode of process here.” 191 Indeed this perspective begins to give some idea of why the theories of Lakoff and Johnson, as discussed in Chapter One could be well served by an underlying process approach. Understanding and experience are relations not only in the more straightforward sense of relations between individuals and the world, but between each other; ideas are involved in the formation of experience, and vice versa.

As mentioned in the previous chapter, the process perspective also allows for the sense that philosophy and theorising are never complete, and are always only fully comprehensible in relation to a world.

It is, then, as an ongoing venture in cognitive adaptation to living experience and as an inherently dynamic activity of inquiry that philosophy should be understood – as a matter of ongoing readjusting our answers to the “perennial questions” in the light of an ever-changing body of information and reflection. 192

Rescher mentions the process view of philosophising “in terms of the pondering dialectic of reflection, discussion, and exposition in the living process that produces those (comparatively) stable artefacts”, the products of philosophy. 193 Gare also evokes, in a more detailed and sophisticated way, the history of dialectics as a way of understanding the practice of theorising, and the relationship between epistemology and metaphysics, tying all this together in his view of the purpose of philosophy that was mentioned in the previous chapter, namely the pursuit of understanding as a mode of being in the world and making it at least partially intelligible. Dialectics is a way of understanding both the method of creating theories of the world, and the continual building and adjusting, creating and discarding of these and the particular ideas associated with them in engagement with social, cultural and natural worlds.

191 Ibid., p 132.
192 Ibid., p 171.
193 Ibid.
Dialectics describes the process by which we move beyond distinctions of subject and object:

Dialectics is opposed to both the attempt to reduce the development of knowledge to the mechanical application of a method and to relativism, since both of these exclude dialogue – methodologism by denying the assumptions underlying any method, and relativism by denying the possibility of mediating between ways of thinking and living based on different assumptions.\textsuperscript{194}

Dialectics is both a form to follow in the pursuit of understanding, based on the metaphor of dialogue and a description of the way phenomena, including but certainly not limited to theories, change. It may be described also through the concept of emergence, with novelty occurring through interaction between constituents and constraints. This point will become clearer during the discussion of categories, and the following discussion of hierarchy theory. For the moment, it is worth recalling that Gare, who pioneers the organisation of the tradition of process philosophy around the intention to move beyond the subject and object, argues also for its organisation around efforts to develop a theory of emergence, for which the emergence of consciousness from nature is paradigmatic. Gare refers to Broad’s description of three types of emergentism that respectively prioritise matter, mind or neither of the two. Gare argues that emergent neutralism, which holds that “[n]either mentality nor materiality is a differentiating attribute, but both are emergent characteristics”,\textsuperscript{195} is characteristic of process philosophy. Thus, we should describe what Broad terms the basic ‘stuff’ of the universe, or as Gare puts it, the basic ‘existents’, as neither mental nor material. The way that this has been done is generally to conceive of them as processes.

Thus, the statement might be made that process philosophy is generally based on an ontology of processes; the basic existents of the universe are best conceived as processes. Whilst there is much to be said about the characteristics of processes and in particular the advantages of seeing processes rather than substance as basic, I will first

\textsuperscript{194} Arran Gare, \textit{Nihilism Inc.}, p 301.
describe two ways to approach this ontology. This is with the intention of highlighting the difficulty of moving from our current mechanistic, reductionist worldview to a process worldview whilst most of our ways of thinking, being and communicating are lodged in the former.

Gare outlines four dimensions of the dialectical epistemology referred to above, that he attributes essentially to Whitehead. These dimensions address the problem of defining new categories from within an existing culture and set of categories. They involve (1) acknowledging “that new categories are developed from within the culture of an already functioning community”, (2) that this occurs through the elaboration of analogies, (3) that new categories are refined through comparison with old categories, which essentially involves casting them into an historical narrative, and (4) that categories can be further developed through their use in actual situations and practices.\(^{196}\)

There is no doubt that new insights must be understood in relation to what has come before, and this is the way that the entire tradition of process philosophy was characterised in the previous chapter. At the same time, however, given the power of existing metaphors in the formation of both experience and understanding, or perhaps in relation to this, theory and practice, as was discussed in relation to Lakoff and Johnson in Chapter One, it is very difficult to see and articulate what kinds of changes in underlying worldview are possible, more difficult perhaps, than Gare makes out. There seems to be a general tension in process philosophy between a process metaphysics, and the resulting worldviews and possible practices associated with it, that portrays itself as an alternative to mechanism and reductionism, basically through offering an alternative to the ontology of substance, and a process metaphysics that is more radically other and thereby more difficult to grasp in the available language. This is perhaps why Whitehead, for instance, who created one of, if not the most thoroughgoing process philosophy, coined so many new terms and created so many categories, with the unfortunate result of being notoriously difficult to comprehend.

\(^{196}\) Arran Gare, *Nihilism Inc.*, p 312.
The general tension mentioned above can be seen in Rescher’s overview of process metaphysics. His intention is both to offer an exposition of process metaphysics and to argue for it as a valid approach that is in fact superior to a substance metaphysics, specifically with regard to the problems of the latter that it is able to resolve. Unfortunately this at times leads to a direct comparison of processes and substances, which may be seen to belie just how different a process metaphysics is. For example, Rescher tables the following comparisons.\textsuperscript{197}

<table>
<thead>
<tr>
<th>Substance Philosophy</th>
<th>Process Philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>discrete individuality</td>
<td>interactive relatedness</td>
</tr>
<tr>
<td>separateness</td>
<td>wholeness (totality)</td>
</tr>
<tr>
<td>condition (fixity of nature)</td>
<td>activity (self-development)</td>
</tr>
<tr>
<td>uniformity of nature</td>
<td>innovation / novelty</td>
</tr>
<tr>
<td>unity of being (individualized specificity)</td>
<td>unity of law (functional typology)</td>
</tr>
<tr>
<td>descriptive fixity</td>
<td>productive energy, drive, etc.</td>
</tr>
<tr>
<td>classificatory stability</td>
<td>fluidity and evanescence</td>
</tr>
<tr>
<td>passivity (being acted upon)</td>
<td>activity (agency)</td>
</tr>
</tbody>
</table>

This is a valid if simple example of the kinds of comparison of categories that Gare suggests. However, the difference between a substance metaphysics and a process metaphysics is more than the difference between basic themes and entities and their characteristics, and this is well described by dialectics, as detailed by Gare and acknowledged by Rescher. The temptation to make a kind of a switch to process using the structure of understanding already provided by a language based on substantialism is ever present. Thus, it can be difficult to avoid describing processes \textit{in place of} things, which can result in statements that refer to a process in ‘thing-like’ terms. For instance, Rescher describes the category of process:

\textsuperscript{197} Nicholas Rescher, \textit{Process Metaphysics}, p 35.
For process metaphysics, the overarching neutral category of *existent item of entity* or *individual* branches out into two realizations: *things* (substances) and *processes* (activities). And the second of these offers a smoother journey.\(^{198}\)

Whilst it is impossible and probably impractical to fully escape this tendency, it deserves notice, thereby supporting an explanation that can acknowledge the need for categories of existence, but somehow maintains the dynamism of process philosophy as its very core, and encourages a continual return to the concept of dialectics. This should become clearer through the discussion of the core category that will be chosen for this thesis, ‘change’, and the way that the category of process relates to this category.

Whilst Rescher mentions the importance of change, he is not completely exact about its place in process philosophy. Of course, this is partly because he is presenting an overview of general orientations rather than suggesting a particular system. Thus he says of process philosophy generally

> However greatly [the] positions differ in other regards (and they do so enormously), they all agree in seeing time, process, change, and historicity as among the fundamental categories for understanding the real.\(^{199}\)

He also says that

> Becoming and change – the origination, flourishing, and passing of the old and the innovative emergence of ever-new existence – constitute the central themes of process metaphysics.\(^{200}\)

In his discussion of process philosophy and nature, he says that the “salient idea of process philosophy is that the world consists of – and must, in consequence, be understood in terms of – changes rather than fixed stabilities.” Thus he refers specifically to C.S. Peirce and his view that not only the so-called phenomena of

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\(^{198}\) Ibid., p 34.
\(^{199}\) Ibid., p 24-5.
\(^{200}\) Ibid., p 28.
These three examples describe change as, alternately, one of a number of basic categories (without describing their interrelationship), a ‘central theme’ (without referring back to its more formal categorical nature), and the only, somewhat paradoxically (but not problematically so), unchanging aspect of the world. Whilst change is obviously central, its unclear position is probably at least partly related to the difficulty of speaking clearly about it from within the current language. The same point may be made more generally about defining categories for a process metaphysics, anti-foundational as it is. Acknowledging their paradoxical and provisional status, as both Gare and Rescher do, only goes some way towards addressing the difficulty of holding the dynamic in the categorical and structured.

Rescher’s summary of the ontology of process is clearer and simpler, perhaps partly, as mentioned, because of its comparison with substance ontology:

Instead of a two-tier reality that combines things together with their inevitable coordinated processes, it settles for a one-tier ontology of process along – at any rate, at the level of basics. For it sees things as not just the products of processes (as one cannot avoid doing) but also as the manifestations of processes – as complex bundles of coordinated processes. It replaces the troublesome ontological dualism of thing and activity with a monism of activities of different and differently organized sorts.202

Whilst, as Lucas pointed out, not all types of process philosophy are ontological monisms that take processes as primary,203 the simplicity of process as a, or even the, primary ontological category has much to recommend it, particularly given the tendency towards metaphysical complexity of some process philosophers. Gare emphasises simplicity in relation to the choice of basic categories, saying that “it can be demanded that the list be kept short so that they can be easily grasped by the

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201 Ibid., p 91.
202 Ibid., p 49.
intellect”,204 and citing Andrew Reck, “Simplicity of theory, spelled out in a manageable list of categories, activates the creative imagination. The philosopher whose theory is simple is better able to keep before his mind the considerations relevant to his categories and their extrapolations.”205 The aim here is to maintain simplicity, whilst attempting a slightly different interpretation of categories than either Gare or Rescher.

As stated, the place of change in Rescher’s overview of process metaphysics is not stable, whilst the view of process as ontologically primary is more so. Looking back at his summary of a process ontology as an alternative to a substance ontology, it is simply worth noting that he uses the words ‘processes’ and ‘activity’ somewhat interchangeably. ‘Process’ seems to emphasise some kind of an integrity, which can then be characterised, whilst ‘activity’ seems to emphasise something more like the processual nature of the real. This can be expressed as the difference between ‘a process’ and simply ‘process’, and the slight ambiguity of interchanging these two senses of process illuminates the difficulty of categorising the dynamic.

Gare’s Categories

Gare, whose project is explicitly the creation of a useful and coherent metaphysical scheme clearly identifies the categorical differences between activity and process. It will be necessary to explain Gare’s Categories of the Ultimate and Categories of Existence before defining the categories for this thesis.

Gare follows Schelling in taking activity as the first Category of the Ultimate. “Actuality is activity; non-activity is non-existence. No unchanging substratum need be supposed for this activity.”206 This concept is described as a conflation of the pre-Socratic concept of kinesis, “meaning the eternal motion pervading everything, without this motion being understood”, and Aristotle’s concept of hyle, “that which is formed, which is the potency to be reformed and which is the principle of

205 Ibid.
206 Arran Gare, Nihilism Inc., p 314.
individuation of forms, but which is unknowable in itself.”207 The second or subcategories of the Ultimate are order and duration. Order is described in opposition to the absence of order, which would be flux.

Any order in this flux can then be seen as some type of limit or constraint which differentiates it, and in doing so makes possible other types of order. And in fact, when this starting point is taken, it becomes evident that all order is facilitating limits or constraints.208

Duration is implied in ordering.

Ordering activity implies a movement from what has existed to that which now exists (that which is active) to that which could exist. It is necessary to acknowledge duration with some kind of proto-memory and anticipation of as yet unrealized future possibilities.209

The Categories of Existence are process, structure and event, process being the first category.

The category of process is meant to characterize primary being or an actual entity, ouïsa – that which exists in the full sense rather than through analysis or derivatively. A process can be defined as an ordering activity which is to some extent (although never entirely) an immanent cause of its own becoming, a self-ordering activity in which activity limits (to use Schelling’s terminology) or constrains itself (to use the terminology of modern hierarchy theory) and reproduces these constraints.210

Structures are understood as being maintained and produced by processes, but also as the relations of potentiality between processes. Thus, “structures, while being particular are also in a sense universal, since they can be identified by their

207 Ibid.
208 Ibid., p 314-5.
209 Ibid., p 315.
210 Ibid., p 316.
substitutability in the becoming of processes.” Furthermore, “most of what people identify in the world as existing ‘things’ are ‘structures’.”

Finally, events include such occurrences as “the coming into being or the destruction of structures and processes, ‘decisions’ by processes to take one path of development rather than another, significant changes within or differentiated activities of processes, and particular interactions between processes.”

Categories for this Thesis

I would like to follow Gare in positing a category of the ultimate and categories of existence, although the categories of existence will be described quite differently from Gare. Only one category of the ultimate will be posited, that of change, to preserve simplicity along with a fundamental ineffability. This is basically similar to Gare’s category of activity, which follows Schelling, but the term change is chosen over activity to emphasise dynamism, and the inseparability of existence and causation at this level, which will help clarify the presentation of categories of existence. Gare’s subcategories of the ultimate, order and duration will be evoked in a different way in the categories of existence, as perspectives for characterising existence rather than belonging to the more basic category of the ultimate.

The categories of existence will be presented as the most basic ways that change may be identified. Change, as the category of the ultimate is without foundation and unknowable. Identifiable change depends on the existence of difference. This is compatible with Gare’s concept of order, but to maintain a dynamic interpretation, the existence of difference will be described as duality in dialectical movement. This orientation towards existence underlies both a causal perspective and the observation of integrities.

Differentiation is a paradoxical concept that acknowledges the dialectic of epistemology and metaphysics. To clarify, the only way that existence can be

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211 Ibid., p 317.
212 Ibid., p 318.
described in monistic terms is change. The simplest way that change can be understood, and existents identified and described is as the dialectical movement of duality. This dialectical movement of duality may be most clearly expressed through the concepts inner aspect and outer aspect, which is a way of referring to the dependence of existence on differentiation, but also that change is always of the whole, implying the underlying wholeness of cause. The identification of observable integrities is most clearly described as the dialectic of process and relation. Thus, the categories of existence are inner aspect / outer aspect and process / relation, and should be considered as concepts that imply each other and attempt to preserve a recognition of underlying wholeness and movement, whilst acknowledging that we may only perceive change as differentiation. The overall perspective on existence and its relationship to change draws upon the work of David Bohm, which will be discussed following an introduction of the centrality of causality in process philosophy.

**Causality**

Referring back to the organization of process philosophy around efforts to move beyond the subject and object, comprehensible also as efforts to develop a theory of emergence, it is clear that causality is absolutely central to process metaphysics. Of course, this is evident in the basic metaphysical category of change, albeit not necessarily easily grasped, given that change as both abstract concept and ultimate reality is essentially unfathomable. It cannot be completely concretely categorised in language or understanding.

Although not central to his characterisation of processes in opposition to substances, Rescher at one point mentions a view of processes that is useful for the present discussion of causality.

It…seems plausible to see existence in process-coordinated terms by taking existing to be a mode of activity. From this angle, existing is an *actus essendi*, a
matter of “putting in an appearance”, of something’s projecting itself into reality by way of taking up a position on the world’s stage.²¹³

Put simply, existence may be seen as taking a position. This view implies the essentially active nature of processes, and that the movement of existing, is always in relation to all that exists. Furthermore, Rescher’s statement demonstrates both the self-generation of existence, and the difficulty of describing the essential self-generation of any process, particularly in relation to the more abstract characterisation of reality as nothing other than change. Thus, the notion of ‘something projecting itself’ into existence is awkward and somewhat unclear.

Gare’s explanation of causation also fits with the notion of taking a position. He describes causality in the same terms as emergence, through the concepts of immanent and conditional causation. Immanent causation is described in terms of supervening causation, which “involves the constraining of constituent processes or activities to produce and reproduce the ‘internal’ environment or field which constrains these constituents.”²¹⁴ Conditional causation is described as “the conditions which generate a new process or allow an existing process to maintain itself in existence.”²¹⁵ Importantly, these two views of causation depend on perspective.

The notions of immanent and conditional causation are complementary, with each instance of causation being characterizable as either an immanent or a conditional cause depending on from which individual they are being defined in relation.²¹⁶

Gare says of his view of causation that it “emphasises that the very existence of anything must be self-creating activity”, relating it to “Aristotle’s notion of causation as applied to the growth of organisms, in which material, formal and final causation are fused.”²¹⁷ In relation to the most fundamental way that reality may be characterised, as change, it can thus be suggested that the notion of cause is only

²¹³ Nicholas Rescher, Process Metaphysics, p 57.
²¹⁴ Arran Gare, Nihilism Inc., p 319.
²¹⁵ Ibid.
²¹⁶ Ibid.
²¹⁷ Ibid.
artificially separable from change. Change is cause of itself, with no underlying ‘thing’ or foundation for this. Such an abstract characterisation of cause is not useful in itself for interpreting processes, except to say that the generation or impetus for any process always already exists in the unfathomable of change. In terms of interpreting cause, or change, we might characterise the principles by which change can be seen to occur concretely in the world, and the concepts of immanent and conditional causation are a reasonable way to do this. They allow for an understanding of causation that is explanatory without being deterministic, for these concepts, as the explanation of emergence, describe change that is not predictable. Thus, novelty and creativity are fundamental.

It is worth emphasising again that the notion of cause should always be considered as a perspective on the category of change. ‘Causes’, as we describe them in relation to emergence, and in relation to processes, are more like a way of interpreting the limits that provide a way for change to take form. Thus, both constraints and constituent conditions are kinds of limits that we might identify, once a position has been identified for explanation. This dynamic might be interpreted through the movement of the dialectic mentioned earlier. This movement is change through difference, and through the continued dynamic of this exchange new positions emerge between. The limits on either side, as constraints and constituents are a way of identifying the dialectic, but not of explaining the fullness of cause as change. To reiterate once again, change is ultimately unfathomable and mysterious, as is cause. Nothing is ever completely explained or explicable. It is necessary to separate the sense of cause as complete explanation, which is the connotation that the term generally carries in Western culture, and the sense of cause as identifiable principle of change.

If we cannot identify any full or complete cause of anything, we might ask what is the most basic level at which we can consistently characterise change. If, as has been argued, existence, or identifiable change, depends on difference, which may be described in dynamic terms as dialectic, then it is worth attempting to characterise cause at this level. This is to describe rather than explain change, in a way that is useful for interpreting the world, and importantly, human reality and experience.
Separating the concept or category of change as cause from identifiable principles of change is a perspective that is able to take at least some account of developments in physics, particularly quantum physics and relativity theory. Whilst it is not necessary to prioritise contemporary physics in a theory of causes that attempts to make possible the explanation of phenomena from many different fields, such as biology and sociology, the understanding of causes at this level should be included in any theory. David Bohm is one of the few quantum physicists who have attempted to extrapolate a world view applicable to other domains from his scientific discoveries. His work is closely associated with process philosophy and his concepts resonate strongly with the current discussion.

Causality as the Inner Aspect and Outer Aspect of Change

As with the overall project of process philosophy already discussed, Bohm is concerned with moving beyond dualisms of subject and object, and nature and consciousness. He uses perspectives developed from work in physics to describe, among other things, our human consciousness, incorporating at all levels of his discussion the notion that taking a perspective, for example in conscious thought, and taking a position, for example of matter in space, are active processes that occur in relation to all that exists.

Bohm’s theory acknowledges the acute differences between relativity and quantum physics, and thus takes as its starting point their one area of convergence, the suggestion of unbroken wholeness. He describes the “unbroken wholeness of the totality of existence as an undivided flowing movement without borders”. The concept of the implicate order is used to understand this, as the order that enfolds within each region of space and time the totality of existence, in such a way that the part is not simply related to the whole, but enfolds the whole. Bohm describes this through the metaphor of the hologram, in which the pattern of interference of light waves from a whole object is recorded such that light shone on any one part of the

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hologram will show the whole object. He notes that this metaphor is a guide only, for the implicate order is to be understood as the movement of light waves which contain information about the whole, whilst the hologram is only a static record of this.

The explicate order unfolds from this.

In terms of the implicate order one may say that everything is enfolded into everything. This contrasts with the explicate order now dominant in physics in which things are unfolded in the sense that each thing lies only in its own particular region of space (and time) and outside the regions belonging to other things.220

The implicate order is seen to be autonomously active and takes ontological priority over the explicate order, which is “secondary, derivative, and appropriate only in certain limited contexts”.221 Whilst the concept of the explicate order, as that which is manifest, and as that with which we are used to dealing, is reasonably easy to grasp, the concept of implicate order is more evasive, not least no doubt because the articulation of a concrete concept presumably belongs to the explicate order. Bohm uses the process of thought as implicit and explicit as a parallel for implicate and explicate order. Thus, “each moment of consciousness has a certain explicit content, which is a foreground, and an implicit content, which is a corresponding background.”222 Bohm says that both immediate experience and thought are “best understood in terms of the implicate order”, and that this applies not only to content but to the “actual structure, function and activity of thought”.223 Furthermore,

The distinction between implicit and explicit in thought is thus being taken here to be essentially equivalent to the distinction between implicate and explicate matter in general.224

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220 Ibid., p 85.
221 Ibid., p 93.
222 Ibid., p 111.
223 Ibid.
224 Ibid.
Bohm mentions the origin of the term ‘implicit’ in the verb ‘to implicate’ meaning ‘to fold inward’, as opposed to the outwardness, or unfolding, of the verb ‘to explicate’. The explicate is only possible in relation to the underlying wholeness of the implicit or implicate. As mentioned, there is an unknown quality, like an inwardness, to the implicit, which itself suggests that for any thing or process to be fully knowable entails that it becomes explicit, which involves qualitative change.

The unbroken wholeness, that forms the starting point for Bohm’s ideas and that is characterised by ineffability, is often referred to as the holomovement. The relationship of the holomovement with the implicate order is not always clear. The sense of the totality of existence being enfolded within the implicate order is used to understand the holomovement, although it is difficult to comprehend how the two differ in Bohm’s theory. Both refer to an underlying wholeness and an ineffability, yet the implicate order appears more definite or concrete than the holomovement, which is described, as suggested by the sense of ‘movement’ in terms of flux and change.

The implicate order has its ground in the holomovement which is vast, rich and in a state of unending flux of enfoldment and unfoldment, with laws most of which are only vaguely known, and which may even be ultimately unknowable in their totality.225

He then refers to the ‘overall law’ of the holomovement, the ‘whole order’ of the implicate, and the ‘sub-order’ of the explicate. Thus, there appears something like a hierarchy of holomovement, implicate and explicate, an explanation that seems to leave the implicate order largely unexplained, except by a ‘ground’ in the holomovement, a problematic description in itself, given the apparent ‘wholeness’ of this order. If the implicate order is the wholeness of existence resulting from the wholeness of change, then it comes to seem somehow manifest, which is paradoxical given its relation to the explicate order.

Bohm invokes the notion of higher dimensions, perhaps to attend to this difficulty.

225 Ibid., p 93-4
What follows from all this is that basically the implicate order has to be considered as a process of enfoldment and unfoldment in a higher-dimensional space. Only under certain conditions can this be simplified as a process of enfoldment and unfoldment in three dimensions.\textsuperscript{226}

Whilst the sense of the implicate expressing higher dimensions than the explicate and relating to a ‘greater wholeness’ that is the holomovement clarifies these difficult relationships, this particular hierarchy of existence doesn’t seem to fit entirely with other ways that Bohm speaks about the implicate and explicate. This is particularly true in relation to sub-totalities.

we have to say that the holomovement enfolds and unfolds in a multidimensional order, the dimensionality of which is effectively infinite. However…relatively independent sub-totalities can generally be abstracted, which may be approximated as autonomous. Thus the principle of relative autonomy of sub-totalities which we introduced earlier as basic to the holomovement is now seen to extend to the multidimensional order of reality.

Thus it seems there can be numerous implicate orders, as each dimension or set of dimensions can be characterised as, or perhaps as relating to or emerging from, an implicate order. Bohm appears to partly get around the problem of the implicate as a wholeness, yet also the existence of a potentially infinite number of implicate orders by using the term super-implicate order and introducing the possibility of the super-super-implicate order and so on indefinitely.\textsuperscript{227}

The description of the implicate order as a “process of enfoldment and unfoldment in a higher dimensional space”\textsuperscript{228} is confusing, given that at this level of three dimensional manifestation, unfolding seems to be associated with, or equated with the explicate order. This may be clarified, and indeed simplified by focusing on the notion of processes of enfoldment and unfoldment, rather than the more substantialising concepts of various implicate and explicate orders, and emphasising

\textsuperscript{226} Ibid., p 97.
\textsuperscript{228} David Bohm, “The Enfolding-Unfolding Universe and Consciousness”, 97.
that these processes take place at every level of reality. This foregrounds the concept of hierarchical organisation that figures prominently in Bohm’s work, and at the same time attributes the same ontological status to the implicate and explicate.

Thus, any method of characterising the world or reality involves the choice of a perspective and may be said to take place at a particular level. In the terms already introduced in this thesis, the most basic description of change is as differentiation. Differentiation is the dialectical movement of duality. This is more easily comprehensible using Bohm’s conception of enfolding and unfolding, and will be described through this thesis in terms of the dialectic of inner aspect and outer aspect. These terms may be considered the two sides of the oneness of change, and relate very much to Bohm’s implicate and explicate, except that they are considered to be ontologically equal despite being different perspectives. This equal status hopefully solves the problem of relating the implicate order and the holomovement.

The holomovement is characterised in the same way as change has been in this chapter, emphasising wholeness, dynamism, causality and ineffability. No matter which level we choose to observe, describe or theorise, we can speak about differentiation as a boundary that faces inwards and outwards, generating inner and outer aspects. The notion of cause is only applicable in the sense of this identifiable principle, and always relates to the fullness of cause as the unfathomable of change. This will hopefully become clearer in the discussion of processes, following the further clarification of causality using Bohm’s example of cause as correlation rather than cause as full explanation.

One of Bohm’s justifications for the existence of a ‘multidimensional implicate order’ occurs through the use of an analogy to explain the non-causal connection of distant elements that emerges in quantum theory. This analogy involves a fish tank with two cameras directed towards it at right angles to each other. The images from the cameras are projected onto two screens in a separate room, creating the ‘two dimensional’ reality of the images on the screens and the ‘three dimensional’ reality of the entire setup. Within the two dimensional reality the movement of fish on the screen will appear to be different on each screen, but movement on one corresponds to movement on the other. The correlation in this case can be explained not by causal
connection between discrete elements, but by the appearance of discrete elements as being the projection of a higher dimensional single reality.\textsuperscript{229}

This analogy can help to describe the notion of causality as identifiable principle of change, in this case a correlation, and can offer some kind of explanation for quantum behaviour. However, there is still a simple cause and effect relationship being described in the relation between the behaviour at different levels; it is essentially a different perspective on the same thing or process, which implies that the higher whole reality is somehow more real than the projection, especially given that the projection is entirely dependent on the ‘source’. All this plays, as do many of Bohm’s ideas generally, into the connotations that are currently tied to concepts like ‘higher reality’, namely that this manifest, explicit world that is largely where we live is somehow less real than the higher oneness of which we have little if any experience or understanding.

It may be said that change is a whole concept, a whole movement. Both inner aspect and outer aspect depend on perspective, and are observable expressions of change. Whilst ontologically equal, they are different, and one is not derivative of the other.

Thus, the generation of novelty may be imagined, somewhat paradoxically, as a splitting of one movement through which new movements and relations are created, rather than as a corresponding change in two realms, levels or perspectives. Seen in this way processes are more like borders in existence, which allow for the discrimination between outer movements, unfolding, and inner movements, or infolding.

The perspective expressed here, then, may be seen as an attempt at a view that is completely compatible with, yet also more dynamic than the hierarchical view described by Gare, whilst also taking full account of the ambiguity inherent in the search for ‘causes’. As will become clearer, this thesis contends that describing principles of change through the concepts inner aspect and outer aspect is the most basic kind of explanation possible.

\textsuperscript{229} Ibid., p 94-7.
Approaching the discussion of processes through the concepts inner aspect and outer aspect allows us to keep in mind the sense of movement and also of perspective when describing processes as entities, as is practical for the discussion and understanding of processes. However, the most basic characterisation of existence is recognised to be the movement of the dialectic, and therefore the identification of the existents occurs through the dialectic of process and relation.

**Processes and Relations**

Identifying processes allows us to delimit change, in the movement of existence, in such a way as to focus on the inner aspect, and this provides a perspective that allows us to speak about processes in the currently available forms of language and understanding. This view is compatible with Gare’s definition of a process as an actual entity, as was quoted previously in this chapter. Rescher’s basic definition of a process is also relevant:

> A process is a coordinated group of changes in the complexion of reality, an organized family of occurrences that are systematically linked to one another either causally or functionally.\(^{230}\)

Thus, a process may be described as a set of changes, given integrity by its differentiation from all other processes. Despite the internal self-ordering, such a separation of one process from the broader reality or process is always, paradoxically, both genuine in terms of existence, and artificial in terms of the choice of a perspective. The difficulty of grasping this may be somewhat alleviated by seeing any given process as always partaking in the *movement* of existence, expressed in this aspect as the dialectic of process and relation. In this context, process corresponds to the inner aspect of existence and relation to the outer aspect. Both are always present and depend on perspective. The dialectic of process / relation will be here assumed to

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\(^{230}\) Ibid., p 38.
be both a simpler and more dynamic interpretation of existence than Gare’s use of the concept of structure and its relationship to process. Gare mentions that:

Ordered potentialities produced and maintained by processes (or which could be produced and maintained by processes) are ‘structures’…While structures are derivative from processes as something produced, they must also be understood in relation to processes that might actualize these potentialities.231

It is necessary now to return to the choice mentioned earlier to include the concept of order in the categories of existence rather than, as Gare does in the category of the ultimate. Order is described by Gare as a set of similar differences,232 and for the purposes of this thesis, order will be assumed to be another perspective on the movement of existence, in other words, the dialectic of differentiation expressed through the aspect of order / disorder. It is only in relation to each other that these concepts makes sense, hence Gare’s depiction of order as in relation to underlying flux or a background of disorder.

Order and disorder are closely related to the concepts of continuity and difference and these two sets of concepts support understanding of each other, and more broadly, the movement of the dialectic. Gare says that his concept of order is similar to, but narrower than the Greek concept of *eidos* (‘idea’ or ‘form’). “As Aristotle conceived *eidos*, order must be conceived as immanent within the world, as its definiteness.”233 But definiteness is discernible only against a background that exhibits some kind of continuity. Thus, order is better expressed as the play of continuity and difference through the dialectic, for it is some kind of regularity of continuity that makes difference into order.

231 Arran Gare, *Nihilism Inc.*, p 317.
233 Arran Gare, *Nihilism Inc.*, p 315.
Time and Space

Process philosophy challenges the Newtonian concepts of time and space as pre-existing receptacles or containers for phenomena, as well as the prioritising of space that essentially views time as a dimension of space, and hence of secondary importance. Process approaches tend to prioritise time.

Time is so central and important in process philosophy because temporality is the definitive characterizing feature of the processual nature of the real. To be real is to occupy a place in the order of time.234

Once again it is important to pay attention to the details of the way concepts are expressed. Whilst Rescher, in this instance, mentions the centrality of time, to describe existence as ‘in the order of time’ does not fundamentally challenge the dominance of the container metaphor, and is therefore more like a switching of priority to time rather than space. This reminds of the care that must be taken to make a genuine paradigm shift to process philosophy, rather than an inversion to an alternative.

Nonetheless, in his discussion of space-time in relation to natural processes, Rescher is clear that space and time do not exist independently of processes, that space-time is “an actual complex or state of process, a process-manifold of sorts”.235 In keeping with the dynamic explanations that have been attempted in this chapter, space and time may be described as kinds of order, perspectives on or aspects of processes. Furthermore, in keeping with the approach chosen for this thesis, time and space should be seen as perspectives on or aspects of the dialectic of process / relation.

This view is similar to Gare’s characterisation of time and space, in which the concepts provide a perspective on processes that is causally descriptive. Thus,

235 Ibid., p 95.
‘position’ can be defined as the set of actual and potential causal relations of entities to each other, while ‘space-time’ can be conceived as emerging or becoming as an order of such causal relations between such positions.236

Gare then characterises space-time through his concept of structure:

Space-time is thereby conceived of as itself a particular kind of structure or structure of structures.237

Causal explanations through the concepts of inner aspect and outer aspect, rely on the perception of differentiation; to identify either, one must choose a ‘border’. Order, as the dialectic of continuity and difference, describes this in an abstract way. Time and space are ways of identifying separation, or difference. Therefore, time and space are kinds of order, and in their respective modes of addressing differentiation, they are descriptive of causal relationships.

The emphasis on time and space as causal relationships aligns with Gare’s view, although the characterisation is slightly different. The explanation attempted here avoids the use of the concept of structure. Furthermore, the intention here is to emphasise the difference between time and space, and that they cannot be understood in terms of each other. Even though process philosophy prioritises time, space remains wholly different and cannot be comprehended in terms of time. Thus, Gare’s notion of a structure (or structure of structures) of ‘space-time’ is questioned.

Time may be seen as a kind of differentiation between potential and actual at the fundamental level of existence. Gare describes the past as that which can causally influence and the future as that which can be influenced. This fits also with Rescher’s explanation of time:

Given its commitment to the centrality of time, process philosophy considers the specious present to be the movable entryway separating a settled and determinate past from an open and (as yet) unrealized and indeterminate future.

236 Arran Gare, Nihilism Inc., p 320.
237 Ibid.
And since this future always brings new situations to realization, the present is ever the locus of novelty, innovation, and creativity.238

These views support an understanding of time as an abstract conceptual tool; time allows for the identification and analysis of actual and potential processes and relations, and thus can encompass that which does and does not exist. However, in the approach that is being attempted here, it is possible to use the concept of the movement of the dialectic to imagine potential as the outer aspect of process, corresponding to relation, and actual as the inner aspect of process. This might allow for some account of how actual and potential also function in dialectical interaction, changing one another in the present.

Following these terms of understanding, space can be conceived as another way of identifying differentiation, comprehensible through the dialectic of actual / potential and inner aspect / outer aspect. The concept of space, however, relies on existence. Thus, time is more fundamental an analytical concept as it is a perspective on what exists, or a way of ordering existence. To summarise, time and space, as orders, are different expressions of the dialectical movement understood through the principles inner aspect / outer aspect and actual / potential.

Summary of Categories

The way that process metaphysics has been approached here has intended to address in a preliminary way the difficulty of creating and using categories that capture the dynamism of process from the essentially static environment of mechanistic reductionism that continues to form so much of our language and understanding.

The most fundamental and most abstract concept, which may be described using Gare’s term, as the category of the ultimate, is change. This is intended to convey a fundamental dynamism and causality, as well as the unfathomable. The categories of existence are assumed to be perspectives on each other, with two perspectives

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prioritised. The categories of existence are intended to characterise the centrality of causality and differentiation, expressed most simply through the concepts inner aspect and outer aspect, and process and relation. The dialectics of order / disorder, continuity / difference and actual / potential are characterisations of existence that offer further perspectives on these two basic conceptual pairs. Time and space are descriptions that arise through the application of these ideas, and time is more basic to the description of existence than space.

This basic way of schematising and interpreting the world will hopefully show its merit through the development of this thesis. The categories and concepts should prove themselves by their ability to offer support for existing theories that do not explicitly describe their metaphysical base, as well as for developing connections between theories from different disciplines by showing their underlying conceptual similarity. Most importantly, however, it is the intention of this thesis to consistently acknowledge the provisional status of its view of human life and experience in the world, a view that includes a metaphysical basis along with biological, social and psychological theory. The aim of this thesis, overall, is to support understanding as described by Gare, as a way of being in the world. Thus, these ideas can only fully show their merit by contributing to changes in the human experience of the world in a comprehensible way.
Chapter Four
Theories of Nature: Hierarchy Theory and Biosemiotics

The point was made in Chapter Two that the kinds of concepts that are characteristic of process philosophy are implied by, and in that sense contained within, the intention to move beyond an absolute distinction between subject and object. The process metaphysics presented in Chapter Three may be said to exemplify this relationship. Hierarchy theory relates similarly to process metaphysics. In a fundamental sense, hierarchy theory makes sense of emergence, which, it may be recalled, was cited by Gare as the main problem around which process philosophy might be organised, encapsulating as it does the intended move. Emergence also clearly invokes the notion of cause as identifiable principle of change rather than ultimate cause, and in this sense preserves the relationship between the unfathomable of change and the most fundamental way that we can know cause, as such an identifiable principle.

Hierarchy theory can accomplish a number of the aims set out in Chapter One. It offers ways of understanding change and development, and importantly, provides a theory that can account for consciousness as emerging from nature, and therefore also concepts by which we might speak about both processes of consciousness and processes of nature. This chapter will attempt to show that hierarchy theory is consistent with the way that process philosophy has been characterised thus far, and can be both strengthened and simplified through alignment with the metaphysical categories that have been presented.

Hierarchy theory is an obvious choice for addressing the problems this thesis has raised, given its clear biological orientation along with its concern with information, allowing it to confidently approach both the physical and non-physical. Even so, hierarchy theory has not been explicitly associated with process philosophy. Indeed, some theorists see it as a practical tool and do not venture into considering its metaphysical underpinnings. Valerie Ahl and T.F.H Allen present the merit of hierarchy theory as its practical application:
Although the questions addressed by the approach may appear sometimes esoteric, there is a great deal of common sense underlying the suggested protocol…Our approach has rested on a utilitarian view of science, in the hope that unprovable ontological assertions can be kept out of the process of doing science day to day. Hierarchy theory is a theory of observation in the face of complex systems. It pretends to be nothing more, but to us who use it as a guide daily, it seems to help keep our feet on the ground.239

Actual use value in everyday problem solving is a high recommendation, however this does not preclude forming an ontological view to support such a practical theory. In fact, a consistent underlying metaphysics and ontology can both support hierarchy theory and potentially broaden its application. Ahl and Allen both question and offer something very different from traditional mechanistic and reductionist approaches, and position themselves against both realism and reductionism, thereby taking an implicit ontological stance, even if they do not wish to enter into ontological speculation. Their fit with process philosophy is in fact striking, given the overall orientation of their exposition, which is to make clear the contribution of the observer and observed in any process of scientific inquiry. In doing this, they enter directly into the process of dialectics which was described in Chapter Three and taken as exemplar of process philosophising, mediating as it does between epistemology and metaphysics. Thus, in alignment with a process metaphysics, hierarchy theory is deemed to be first and foremost a practical means for moving beyond distinctions of subject and object, prior to its characterisation by various concepts. This claim holds true for and unites other hierarchy theorists who will be mentioned in this chapter, Howard Pattee and Stanley Salthe, as well as the biosemioticians Jesper Hoffmeyer, Claus Emmeche and Jay Lemke. These theorists at times invoke quite different concepts and terminology in their approaches to hierarchy yet share common themes.

Given the background in biology of all the theorists mentioned, it is not surprising that hierarchy theory is generally outlined initially in relation to material systems followed by an extension into non-material situations. This confirms its origins in attempting to deal with situations beyond the reaches of mechanistic, reductionist

analysis, namely situations of complexity. Salthe outlines five ways in which complexity has been defined, all in some way making use of the notion of information, such as the information content or capacity of a system, or the amount of information (‘length of the logical chain’) needed to describe a system, yet he opts for a ‘more ontological’ definition of complexity.

A situation is complex when two or more systems occupy the same physical coordinates but do not regularly interact.\footnote{Stanley Salthe, \textit{Development and Evolution: Complexity and Change in Biology}, (Cambridge: MIT Press, 1993), p 5.}

Ahl and Allen offer a different definition:

\begin{quote}
We defined a complex system as one in which fine details are linked to large outcomes. In order to describe adequately a complex system, several levels need to be addressed simultaneously.\footnote{Valerie Ahl & T.F.H Allen, \textit{Hierarchy Theory}, p 29-30.}
\end{quote}

Both definitions involve the distinction between levels, and they are complementary because they highlight the two sides of understanding levels, that the differentiation that brings levels to our attention relies both on dynamics and descriptions. Thus, Ahl and Allen identify the centrality to hierarchy theory of “issues of \textit{scale, levels of organisation, levels of observation, levels of explanation} and relationships between these levels”.\footnote{Ibid., p 30.} At heart, hierarchy theory separates levels so as to gain understanding of complex situations, maintaining all the while an acknowledgment of the role of the observer in doing this; differentiation involves choice on the part of the observer yet is not wholly arbitrary. In general, hierarchy theory is concerned with the identification of levels to better understand the relationships between these levels.

The concept of level describes both some kind of phenomenal integrity as well as the causal relationships between this integrity and a larger system or hierarchy. The sense of observable integrity encapsulates that it is the process of observation and its associated choices that allows for the identification of such an integrity, yet there is some amount of reliability in this process, otherwise identification would not be
possible. Mechanism has tended to define parts in terms of physical integrities, yet this has shown itself to be limited in terms of understanding dynamics and part–whole relationships. Conversely, hierarchy theory can speak about integrities other than objects in space. One major way it does this is to focus on frequencies of interaction, in this way prioritising time rather than space. Thus, rates of interaction become a way of differentiating levels and the focus shifts from things to processes. Lower levels in a hierarchy tend to exhibit faster rates of interaction than higher levels.

The levels approach of hierarchy theory allows for the isolation of a phenomenon for observation, in such a way that it can be identified as a level in itself, as well as by its relationships with levels immediately above and below. Thus, the level immediately below may be termed constituents, while that above acts as a set of constraints. Both levels are expressions of possibility; they may be understood as upper and lower limits. Constituents are better described as a mode of interaction between parts which may or may not be physically observable integrities, than simply as parts, whilst constraints set the environment. The given level is thus susceptible to changes on either side, but in general does not regularly dynamically interact with either, as per Salthe’s definition of complexity.

Hierarchy theory is thus based on the concept of emergence mentioned in Chapter Three. To reiterate and build on this introduction to the concept, emergence is essentially a causal concept that emphasises the sense of occurrence between, with environmental constraints having as much of a causal role as constituents. Focus is shifted away from prediction, as emergence gives a central role to novelty and creativity. Given that all phenomena that we can characterise are in hierarchical relation to a world, novelty always occurs in relation to some sort of limit. In this way, the notion of constraint and freedom may be understood as complementary rather than opposing terms, highlighting the artificiality of mechanism’s commitment to determinism. The goal of understanding the world and its countless phenomena necessarily shifts from deterministic accounts to descriptive explanations. Hierarchy theory shows us some of the explanations that are possible in the absence of a complete determinism. Freed up from the need for such absolute accounts, hierarchy
theory can approach problems that are well beyond the scope of mechanism and
reductionism.

Given that we can actually characterise a great deal of the world’s phenomena it is
evident that we can speak about recurrence in a comprehensible way without having
to resort to determinism. Thus, an underlying assumption of hierarchy theory is that in
nature there is the tendency to repeat. Indeed, nature’s tendency to take habits is a
much quoted insight of Peirce,\textsuperscript{243} to whom some hierarchy theorists look for
inspiration.

Repetition is a perspective on change, and highlights the duality of perspective that
arises again and again with hierarchy theory, and is clearly consistent with the
metaphysical schema attempted in Chapter Three. Repetition describes a kind of
continuity of dynamics, but is also involved with identification as in a sense there is
no such thing as actual repetition because change is always occurring; the same
dynamic at a different time is not the same dynamic and is in a different relation to
what has come before. Thus can we identify both continuity and difference in the
same situation, and it is the dialectic of continuity and difference that gives rise both
to phenomena and to our descriptions of them, which are, of course, only separable in
theory.

Arguments emphasizing either continuity or discontinuity turn on the usefulness
of the characterization of the phenomenon, not upon ontological assertions about
nature being truly discrete or otherwise.\textsuperscript{244}

Such duality of perspective is a common and unifying theme of hierarchy theory and
will be discussed in relation to the work of Ahl and Allen, and Salthe, particularly in
relation to types of hierarchy and definitions of a self. This will be further related to
Pattee’s perspective on dynamic and structure, and finally to biosemiotics.

\textsuperscript{243} C S Peirce, “Design and Chance”, (1883-1884), in Nathan Houser & Christian Kloesel (eds), \textit{The
Essential Peirce: Selected Philosophical Writings, Volume 1 (1867-1893)}, (Bloomington: Indiana
\textsuperscript{244} Valerie Ahl and T.F.H Allen, \textit{Hierarchy Theory}, p 135.
Duality in Hierarchical Perspectives

Hierarchy theory may be characterised as involving the dual perspectives of scale and structure, with the underlying assumption that a full account of any given phenomenon requires both perspectives. Ahl and Allen state that

Forging a link between scale and structure, without confusing the contributions of the observer and the observed, is at the heart of hierarchy theory.\(^{245}\)

The identification of repetition creates structure, imposing static definitions on the world’s flux:

While our experiences of the world are linked to change over time (dynamics), our definitions which correlate with patterns of repeating experiences, are static and available to serve as elements in cognitive models.\(^{246}\)

Whilst Ahl and Allen here offer a clear way of understanding the role of definitions in the creation of structure, thereby allowing us to remain aware of the role of the observer, it is important not to become rigid in this dichotomy, but to see the duality here as itself representative of natural processes. This relates to the concept of dialectics and one of the aims of this chapter is to clarify this point.

Pattee, in his discussion of constraints, addresses the concept of structure in hierarchies in a similar way: “hierarchical constraints or rules are embodied structures that are to some extent ‘frozen accidents’.”\(^{247}\) This implies that the sense of imposed structure is present in hierarchies generally; the imposition of definitions is characteristic of the emergence of a new level.

In his book *Development and Evolution*, Salthe outlines two types of hierarchy, the scalar and the specification hierarchies. They correspond to some of the distinctions

\(^{245}\) Ibid., p 67.
\(^{246}\) Ibid.
made in Ahl and Allen’s *Hierarchy Theory*, and will be discussed as a way of explaining some of the distinctions that are fundamental to hierarchy theory, and of entering into a discussion of duality and interpretation.

Salthe is not always completely clear about the differences between the two types of hierarchy, or the appropriateness of either for any particular situation. The specification hierarchy is a developmental hierarchy that may be traced back to Aristotle.\(^{248}\) It is essentially a tool for the classification of stages of development rather than a method for describing the actual dynamics of development.

‘Development’ is defined as “predictable, irreversible change”\(^ {249}\) and, as the name suggests, the specification hierarchy describes the sequence of knowable stages through which a system moves, from general to more specific. Development, however, is not to be confused with individuation, which refers to an individual’s irreversible accumulation of historical information. The specification hierarchy, then, is “for understanding the production of tokens from types”.\(^ {250}\) A token is an individual expression of a type, although never fully describable as a type (otherwise it would not be an individual). To speak of types is essentially a way of ordering individuals whilst acknowledging their differences. A type is thus an order of discourse, and the specification hierarchy, given that it is concerned with knowable stages, must produce a description of movement through types, with an individual retaining the defining features of earlier types as it moves through stages.

The specification hierarchy is concerned with discourse. Change through development occurs as ‘qualitative jumps’, emergence, but the notion of a ‘jump’ is a construction of discourse, as “the material situation is fuzzy – or really analog”\(^ {251}\) and it is only our description, as our tool for understanding that “must be crisp, digital and bounded with Aristotelian logic.”\(^ {252}\) A level, as comprehended through the specification hierarchy, is an integrity or an entity seen through a particular discursive perspective. Thus, any one entity embodies many integrative levels. The relations that describe an

\(^{249}\) Ibid., p 29.
\(^{250}\) Ibid., p 141.
\(^{251}\) Ibid., p 84.
\(^{252}\) Ibid.
entity occur, therefore, between levels as an expression of the developmental stages embodies, each completely, within a given individual. The major structural characteristic of the specification hierarchy that distinguishes it from the scalar hierarchy is that entities at more general, less specified levels are “more alike, more readily interchangeable”, and importantly, less complex than entities at higher levels.

Salthe’s description is unfortunately a little unclear as, in some cases, the concept that a given entity wholly embodies integrative levels does not accord with the change over time inherent in development. In these cases it is more clearly the description that is at a certain level. Salthe’s example of the ‘fully transitive’ relations between integrative levels is that ‘I am a mammal every bit as much as I am human’. There is a sense in which the description of me as a mammal is interchangeable with the description of any other mammal, but there is a need to be clearer about the application of this description to me as an entity; the description relates to the entity as an evolutionary type. The confusion here seems to be related to the use of the concept of development when it is not being used to describe an entity through time; there is no stage at which I am a mammal but not a human, even though in evolutionary terms, my being a human entails my being a mammal. However, considering human development through various stages of the actual life cycle of a human, it is illuminating to imagine earlier stages of development, such as stages of childhood, as exhibiting more generalizable and predictable types of behaviour than later stages. Yet in application of the developmental perspective, I cannot be said to embody stages of childhood in the same way as I characterise my current stage of development.

From the scalar hierarchical perspective, entities at every level are equally complex. Salthe says that “Entities in the scalar hierarchy are…wholes with nested parts extending downward in scale indefinitely.” Entities within the specification hierarchy are “contours, or overall integrities in space-time.” The specification hierarchy may be more limited in its objects of description, whereas the status of

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253 Ibid., p 68.
254 Ibid., p 69.
255 Ibid.
equal complexity at all levels given in the scalar hierarchy makes it more apparent
that any phenomenon is describable; it will always extend downwards in scale
indefinitely, and by implication be a part of larger systems, and therefore the scales
above it extend upward and could just as well be the object of our choosing.

Characteristic of the scalar hierarchy is what Salthe terms “noninteractive constraint
capability.” Any given process can only occur at one level and acts as a constitutive
process or constraining circumstance for other levels but does not dynamically
interact with it on a regular basis. Interactions across levels come only as the form of
“material perturbations”. Distance in scale separates events and processes at
different levels, and scale can refer to both spatial and temporal scale, as mentioned
earlier.

Ahl and Allen distinguish between empirical and definitional hierarchies, involving
two different ways of characterising levels, in terms of two types of entities, “those
entities and levels that derive from definitions, and those entities and levels that result
from empirical observation.” In many ways these correspond to Salthe’s types of
hierarchy. We can easily see that hierarchy, and the relations by which it is organised
can be created by a criterion that we apply to situations, resulting in a definitional
hierarchy. Ahl and Allen see this kind of hierarchy as organisation in terms of the
choice of a single criterion. Therefore, this is essentially a tool for classification of
types and the relations between types. The empirical hierarchy, on the other hand,
is ordered in terms of observation and “according to the spatial and frequency
characteristics of the entities that occupy each level”, corresponding to Salthe’s
definition of the scalar hierarchy. This kind of hierarchy is easiest to imagine in terms
of nestedness, in the sense of containment, such as a cell in the human body which is
contained within an organ, with levels separated in terms of rates of interaction. Ahl
and Allen note however, that containment is not a necessary attribute of empirical

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256 Ibid.
257 Ibid.
259 Their example is of organising a food chain in terms of the criterion of ‘depends on for food’, in
which a wolf pack is dependent on “the slower moving upper-level herd of ungulates”, differing from
the way that a food chain would usually be organised, with the prey item being the one constrained by
the predator. This shows the way that definitions control levels in the hierarchy. (*Hierarchy Theory*, p
97)
260 Ibid., p 79.
hierarchies; non-nested hierarchies also exist, although they tend to appear more abstract.261

In terming these two basic types of hierarchy definitional and empirical, Ahl and Allen are drawing attention to the way that both ‘discourse’ and ‘nature’ organise. Whilst they are very clear about the choices involved in observation, and therefore the aspect of observation that is constructed, in their distinction between the definitional and empirical they seem to imply a certain polarity in types of hierarchy or the way that the world might be described, that deemphasises the way that each hierarchical type partakes of the other.

It is perhaps only the choice of terminology that makes Salthe’s definitions appear to be less polarised. In relating the specification hierarchy to the process of development, he is highlighting the relationship between dynamics and definitions within this hierarchy more than the definitional hierarchy implies. Yet, in doing this, the specification hierarchy becomes, as mentioned, a little difficult to understand and apply.

The difference between the authors’ choices for exposition might be the following. Whilst the specification hierarchy is obviously concerned with the classification of types, Salthe sometimes discusses it in relation to the process of development through stages. The definitional hierarchy is more obviously static in a sense, more completely determined by the criterion for organisation. The scalar, or observational hierarchy is easier to grasp, particularly when the condition of nestedness exists. However, the scalar hierarchy is also static, in that it seems to describe a state of affairs rather than the process of change. Thus, there is a sense in which all of these definitions are static; in some ways this might simply be related to the unavoidable paradox of speaking about change, although hierarchy, organised around the principle of emergence, should be able to theorise more dynamically.

261 Ahl and Allen give the example of the American legal system, in which the Supreme Court and Constitution constrain the behaviour or state courts and individual police officers. (Hierarchy Theory, p 104-5)
In relation to Salthe, whilst we may identify stages, and describe the relations between definitions through the specification hierarchy, this is not enough for speaking about the movement through stages. Reflecting back on the definitional hierarchy, there is perhaps a little confusion between the classification of entities and the classification of stages, even though in an evolutionary sense, these categories cross over. The point to draw from all this is that the way that both Ahl and Allen, and Salthe define hierarchies are static, in terms of the snapshot of a situation, whereas speaking about actual change must involve both hierarchical perspectives, and it is the interaction between these perspectives that can potentially bring us closer to understanding change. Whilst the theorising of change is present in the work of these authors, it is perhaps not as explicit as it could be.

Pattee is well aware of this point. With regard to the collection of essays, *Hierarchy Theory: The Challenge of Complex Systems*, that Pattee edits, he remarks,

> The common theme characterizing hierarchical systems in these papers that I believe should be emphasized is the double requirement of *levels of description* as well as the more obvious requirement of *levels of structure*.262

Furthermore,

> My own view is that *the relation between the structural and descriptive levels is the central problem* that must be solved to have a hierarchical theory of control.263

In a chapter more explicitly concerned with change, Ahl and Allen refer to Pattee’s distinction between laws and rules, which expands upon the previous point and is worth quoting at length.

> The distinction between structure and behaviour is important. Howard Pattee has identified that we need two sets of restrictions to describe phenomena. Once again, here the issue is description of nature and not nature itself. The two sets

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263 Ibid., p 136.
of restrictions Pattee labels “laws” and “rules”. Laws capture the dynamical aspects of phenomena and are the contribution of the observed to phenomena. Laws are rate-dependent, inexorable, universal, and structure-independent. They restrict phenomena to what is possible. Rules on the other hand, are more local and capture the structural aspects of experience. Rules are rate-independent, local, arbitrary, and structure-dependent. They capture the linguistic, symbolic aspects of system description. They are the contribution of the observer.264

By consistently paying heed to the fact that they are concerned with our descriptions of nature rather than ‘nature itself’, Allen and Ahl emphasise constructedness in a way that becomes a little confusing. In invoking Pattee’s distinction between ‘Subjective Rules and Objective Laws’, but setting the context for this as our ‘description of nature’, Ahl and Allen may be seen to bring their discussion more into one of discourse rather than one concerned with something ‘actual’. Of course, they perhaps simply mean that subjective rules and objective laws can only ever be artificially separated, as they later mention that

There is a certain contradiction to description by rules as opposed to laws. The solution to the contradiction is to recognize that both are necessary for a full account of phenomena.265

Thus, they refer also to the wave / particle duality in physics as exemplifying the need for dual description, each drawing out different aspects of a situation, and each necessary for a full account. This acknowledgment of duality, and the need for dual description is worthwhile for the explanation of hierarchy theory, as well as more broadly applicable to the project of moving beyond absolute distinctions between subject and object. However, this account perhaps does not probe deeply enough into the problem. The views of Pattee mentioned earlier can begin to illuminate this; it is not enough to recognise that two descriptions or perspectives are possible and necessary for a full account. What is of deeper importance is, as Pattee says, the relation between these. Put simply, the sense of ‘what is actual’ is more important than Ahl and Allen make out. Even though they appear to acknowledge this through

265 Ibid., p 184.
their book, at a deep level they do not, and this is clear in their wanting to shield their theory and its application from ontological speculation; it simply cannot be avoided. It is hopefully beginning to become apparent that a way of understanding this entire dilemma is through the process of dialectics described in Chapter Two. Indeed, as mentioned in relation to this, dialectics may be the only way to approach this difficulty, which is at heart the difficulty of moving beyond subject and object.

Dialectics should refer to that process mentioned by Gare that moves between epistemology and metaphysics to generate understanding as a living process, but also in the other sense it was described, as the most basic way of understanding the movement of change. The problems that have been highlighted with regard to structure and dynamic may be partly resolved by being recast in the terminology developed in Chapter Three. Thus the notion of dynamic is better and more simply expressed as process, along with the term relation being adopted instead of structure. The relation between them is as the inner and outer aspects of differentiation. As more obviously dynamic, process is inward looking and continuous. Care must be taken to maintain the dynamism of change also in the outer perspective of relation. Therefore, relation is not static, but change in relation occurs in discrete jumps. There is in fact a wholeness involved in both perspectives, which may be attributed to their relation to each other. As with the discussion of inner aspect and outer aspect, it is important not to see process as primary and relation as a secondary perspective on what is primary; they both contribute to an understanding of differentiation, seeing the whole of change present in both sides of differentiation.

Importantly, process is not only what is actual, as in the contribution of the observed and relation what is descriptive, or a matter of discourse. Reflecting back on Ahl and Allen’s comment pointing to the difference between the description of nature and nature itself, we might contend that there is no such difference. It is not only the obvious point implied in their work, that any account of nature involves ‘nature itself’ and yet is necessarily a description. Processes of nature are ways it describes itself, and when we describe nature we are also taking part in natural process: we express nature and nature expresses through us. One way of beginning to clarify this point is to look again at the way dialectics has been described and used in Chapter Three, as the dialogue between epistemology and metaphysics that can generate understanding,
and as the dialogue between inner and outer aspects, the two sides of differentiation that is the most basic way of understanding change; dialectics, in both senses is a ‘natural’ process. This will all become clearer through a discussion of biosemiotics further in this chapter, following a discussion of boundaries, dissipative systems and the concept of self.

Boundaries

Understanding borders or boundaries between levels is a crucial aspect of hierarchy theory, particularly of understanding how levels emerge and are maintained. As with so many other concepts that have been discussed in this thesis, and as befits our cultural and linguistic past, it is tempting to imagine a concept like boundary in static and substantialising ways. In line with the kinds of conceptualising underway in this thesis, the term boundary should be taken as one way of describing a dynamic situation, fundamentally related as it is to the concept of differentiation, as the simplest form by which we can conceive change. Differentiation and boundary creation are synonymous.

Pattee recognises the importance of the boundary as the locus of change, when he says in relation to his discussion of the ‘physical basis of hierarchical control’, that “hierarchical control operates between levels and is therefore a problem of the nature of the interface between levels.”266 This reminds, of course of the overall notion of causality, being the occurrence of emergence between.

It is relatively simple to see that boundaries are ways of speaking about differentiation in relation to a broader view of change, particularly recalling the separation of levels as the difference in rates of interaction. Thus, a boundary is not simply an ongoing process of differentiation, but the differentiation of differentiation, in the sense of the differentiation of kinds of change. Ahl and Allen explain that “The border

corresponds to a change in rate of interactions for a large number of different processes.”

Ahl and Allen describe the crossing of boundaries in a simple way, through the notion of filtering, and in a more complex, yet also more concrete way in terms of surfaces. Thus, they explain,

Filters are usually identified with surfaces, surfaces being the places where filters operate. Surfaces can be conceived as filters slowing the flow of material, energy, or information.

Furthermore,

Surfaces will spontaneously form when there is a significant gradient in concentrations of information, energy, or matter. Surfaces amount to local places across which there are significant differences...That layer where the difference is localized is the surface itself. On either side of this new surface, the gradient flattens out.

In these comments about surfaces, Ahl and Allen allude to the duality of surfaces that is implicit in the concept of emergence. The surface is both a border between and a level in itself. Whilst a surface need not be physical, the concept is perhaps somewhat misleading, as it does not pay enough attention to what the surface is in itself, as opposed to the surface as a mediating layer. Perhaps a similar criticism could be made of the term boundary, emphasising the between but not the dimensions of the actual boundary. Indeed, the term boundary does not make sense without the term level. The level emerges between, but in this emergence it acts as a boundary between the level immediately above and below. Keeping this in mind demonstrates again the duality of the process of differentiation; emergence between is both inward looking and outward looking. With regard to this, then, we can more easily grasp the process of differentiation through the duality of the concepts of process and relation; the process

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268 Ibid., p 139.
269 Ibid., p 147.
looks inward and exists for itself, corresponding to a level, whilst the relation looks outward and exists as a boundary. In this way we can see how process and relation are perspectives on change, how they are the same but different.

Integrities are described by boundaries or relations; Ahl and Allen explain that “An important aspect of surfaces is the way that there is strong interaction inside a surface and weak, sluggish interaction across.”\textsuperscript{270} This reminds of the definition of levels in the scalar hierarchy as not regularly dynamically interacting with levels above and below. Importantly, some boundaries hold for many processes, providing an added dimension of hierarchy theory; often many processes occur within one boundary giving rise to stronger integrities. Ahl and Allen describe natural entities in relation to surfaces:

A natural surface is one that appears to remain in the same place, even when one changes from observing one type of signal to observing another. Since the filter at the surface works on a large number of signal types, the surface appears in the same place when observed under different criteria.\textsuperscript{271}

They define ‘natural’ in relation to natural classification, in terms of “an ordering that reflects a large number of criteria that all coincide to give the categories or classes” and they claim that “Natural entities have a certain robustness”.\textsuperscript{272} They emphasise that ‘natural’ can refer to something ‘man-made’; their example is of a national border.\textsuperscript{273}

The robustness of the natural entity described by Ahl and Allen adds a certain multi-dimensionality to hierarchy theory, reminding us that whenever we choose one level for observation, we are necessarily abstracting from a situation of complexity. The notion of many processes within one definitional entity is a tricky one. In a sense different processes must also mean different relations, even if the border appears to be the same; perhaps this is due to imaginatively extending the idea of borders that we see in physical space to those that are more abstract, such as a national boundary.

\textsuperscript{270} Ibid., p 149.
\textsuperscript{271} Ibid., p 145.
\textsuperscript{272} Ibid.
\textsuperscript{273} Ibid., p 144-5.
Whilst the boundary holds, it is the relation of processes inside and outside, so if the processes are different, the relations must also be different. This perhaps shows up the way that natural entities, in this way of defining them, are arbitrary definitions.

It is, however, worth making a connection between this use of the term ‘natural’ and the way that Lakoff and Johnson speak about ‘natural dimensions’, and ‘natural kinds of experience’. There is a link here with the concept of repetition, not in a simple way, but in the way it is used here; as categories that can incorporate a wide variety of criteria, repetition not in phenomena but in their generalisation to a particular class.

Given that one of the underlying commitments of hierarchy theory is that everything is hierarchically related, in the sense of hierarchies, specifically scalar hierarchies, extending in principle infinitely upwards and downwards, it is important to understand the kind of border that supports the existence of integrities, both physical and non-physical, that we might consider entities. Ahl and Allen’s discussion of natural entities only goes part way toward this. Salthe’s explanation of a self through the concept of dissipative systems and semi-autonomy is more useful in this regard.

**Semi-Autonomy and the Definition of a Self**

Central to understanding dissipative systems is the concept of self-organization; indeed the two are inseparable; “self-organization refers to all dissipative structures”. Self-organization describes a semi-autonomous system and allows us to include a concept of “change referring primarily to a system itself rather than to its scalar hierarchical connections with the rest of nature.” Along with this, the concept of closure describes “integrities between observers and objects”. Self-organization implies the coherence of a system through time as it develops through a sequence of structures. Thus, we can begin to understand the application of the specification hierarchy to identify a system by virtue of the stages it contains or moves through, and the way in which the scalar hierarchy allows for observable integrities existing within,

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275 Ibid., p 151.
276 Ibid.
277 Ibid., p 151-2.
yet delineated from a larger context. A situation of self-organisation is one in which
dynamic and structure, or process and relation, must come together.

Salthe defines dissipative structures as “organizations that dissipate energy and also
entropy” and describes the organism as the “paradigmatic dissipative structure”.
Dissipating energy and entropy implies a fluctuating order and disorder that
nonetheless maintains enough balance to support an integrity through development.
The shifting expressions of order and disorder through time can be broadly schematicized into characteristics of the life cycle of a dissipative structure. Although organisms are described as being paradigmatic dissipative structures, the characteristic life cycle produces a description that is applicable to some nonliving systems as well as living systems. Salthe thus claims that this view “forms an important mythic link between humans and other natural forms”.

Very generally, the play of order and disorder establishes the life cycle of a
dissipative structure. An immature system “realizes a larger proportion of its potential
states than a more mature one”, whereas a mature system, “realising many more
actual discriminable states…still embodies a much smaller proportion of its potential
states.” The direction early in the life cycle of a system is towards increasing order
in the maintenance of integrity through both development and individuation. This
occurs through the forming of habits. The trade-off with this increase in stability is an
increased rigidity and thus a decreased ability to adapt to environmental fluctuations;
“the consequent loss of flexibility ironically results in an overtly more entropic style
of behaviour”. Within a system’s context then, apparently more ordered behaviour
becomes increasingly disordered and the system begins to senesce. Senescence is the
latter part of the life cycle of a system, during which the tendency to change reduces
as structural complexity increases. Salthe describes the overall shift from a high
degree of physical entropy in the early stages of the life cycle, compared to a high
degree of informational entropy in later stages.

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278 Ibid., p 107.
280 Ibid., p 115.
281 Ibid., p 152.
282 Ibid., p 188.
283 Ibid., p 8.
A ‘self’ emerges as the system collects the effects of its own functioning, further individuating in what is termed the ‘collecting / cascading cycle’. Development and individuation of a self exposes the inadequacy of the concept of homeostasis; it is limiting to describe a system as returning to a prior state of equilibrium following perturbations from outside the system. Salthe uses Waddington’s (1957) concept of homeorhesis. This is based on the recognition of a need for a “locus, not only for self-organization, but for our own selfhood and its agency”,284 for an overall consistency to describe a changing system. Salthe resolves this by viewing the entire life of an organism or system as one moment, capturing what he terms the ‘who’ in the ontogenetic trajectory. Following this, homeorhesis describes a system’s return to its trajectory following a perturbation. Importantly, the trajectory is not predetermined; whilst being perhaps previously locatable in a specification hierarchy, it is the result of earlier “vague searching among possibilities” leading to the increasing order that is “commitment to a given trajectory”.285

As alluded to, Salthe’s discussion of the dissipative system shows more clearly his use of the specification hierarchy to describe dynamics through definition, rather than being more obviously constructed by definitions as the definitional hierarchy is. The important aspect here is the repeating of stages in different individuals of the same type, which can be applied to the evolution of both physical and non-physical systems. The argument as to why stages of development tend to be repeated is one that is given for the existence of hierarchical organization generally, involved with the dynamic of order and disorder that can provide the potential for a higher level of organization but can also result in a collapse into disorder. The potential for creation and destruction is related to this. Hierarchical organization ensures that when a system cannot reorganize in response to changes in the environment the collapse is generally contained to collapse to a lower level rather than to complete disorder or annihilation. This explains, at least partially, the ‘irreversible’ nature of development. The repetition that would apparently limit novelty is actually supportive of it, an argument that holds for the macro process of evolution as well as for the more easily observable processes of development such as that of the human being through the life span.

284 Ibid., p 181.
285 Ibid.
In a sense, semi-autonomy serves a similar purpose, as it gives a greater scope for
development within the system, yet always of course in relation to a broader context.
Identifying the self with the ontogenetic trajectory can help us to grasp the subsisting
through time that provides enough autonomy such that this process as a whole, the
inner aspect of the differentiation of a self, supports the development of constituent
processes and relations at levels lower than that of the self. We might say, then, that
selfhood, for a human being, begins with the fertilised egg, and all else following is an
opening inward, always of course, also as an outward relation. Importantly, though,
the self is the whole of this process, regardless of at which stage the process ends.
This will be discussed further in relation to biosemiotics.

**Biosemiotics**

This chapter has so far introduced hierarchy theory in relation to three key areas;
hierarchy theory as centrally concerned with the relationship between ontology and
epistemology, with the relationship between dynamic and structure, and with the
concept of a self. These concerns are all relatable to attempts to move beyond ultimate
dualisms of subject and object. These are fundamental questions, and of the three
theories referred to, Pattee appears to be most cognizant of their depth. The question
of the relation between dynamic and structure emerges as fundamental, and
expressible in this depth as of the comprehension of process and relation. If this
question is seen as the central concern for hierarchy theorists, as Pattee suggests, then
the field of biosemiotics may be seen as a natural progression of efforts to address it.

Biosemiotics incorporates the analysis of sign processes into the study of biological
systems. Along with hierarchical concepts of organisation and emergence, it draws on
concepts that elucidate the communication processes by which an organism creates its
world as a kind of interpretive dialogue with its surroundings; biosemiotics is
centrally concerned with the transfer of information. Thus, biosemiotics engages with
the process of observation as a part of living processes; emphasis on interpretation
means that we incorporate in our understanding of the sign that a sign must always be
a sign of something for some observer. For a sign to be comprehensible within some
observer’s system of interpretance, it must have some kind of relevance to that
observer, summarised in Bateson’s much quoted “difference that makes a difference”. Biosemiotics is concerned with the creation of meaningful relations through processes of selection that are best understood semiotically. Jakob von Uexkull’s concept of *umwelt*, which describes the surrounding world of an organism, actively created through its own perceptual engagement and ability to make distinctions, is often invoked.

In a sense, biosemiotics is simply making clearer certain often discussed aspects of hierarchy theory; it chooses to address the problem of description through the study of signs, and to announce the centrality of sign processes to biology, or to put it more clearly, to life. It addresses the relationship between physical and symbolic modes of interaction, and the definition of selves in the one question. The identification of life and the identification of a self appear bound together:

For a system to be living, it must create itself, i.e. it must contain the distinctions necessary for its own identification as a *system*. Self-reference is the fundament on which life evolves, the most basal requirement.

This expands upon Salthe’s definition of a self. Semi-autonomy remains fundamental, but Jesper Hoffmeyer and Claus Emmeche here make more explicit the point that a system that, in Salthe’s terms, collects most of the effects of its own functioning, must be able to identify its own boundaries in some way; to collect dynamic effects, a system must also be able to describe itself to itself. Hoffmeyer and Emmeche conceptualise such self-reference as coded description and they observe a fundamental duality in living systems.

The chain of events which sets life apart from non-life, i.e. the unending chain of responses to selected differences, thus needs at least two codes: one *code for*

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action (behaviour) and one code for memory – the first of these codes necessarily must be analog, and the second very probably must be digital.289

As with the prior discussion of the duality of dynamic and description in hierarchy theory, it is the relation between the two modes of analog and digital that can, potentially, describe life in the fullest sense.

It is this creative interaction between the two versions of the message that is entailed in code duality. Where the digital code takes care of the objective, conservative (or inherited) aspects of life, the analogic code – i.e., the actual organism – is designed to deal with the here and now; it represents the subjective, active, ecological protagonist in life.290

The use of the term code allows for the implementation of Peirce’s triadic sign relations, as code invokes a message to be de-coded by someone; in the language of Peirce, which Hoffmeyer, Emmche and Lemke all draw upon, the code is the primary sign of an object for an interpretant. Thus, we can speak about DNA, which is traditionally understood as a code, being a message for the fertilised egg, in relation to the broader environment. Whilst the DNA is, in one sense, a passive message, it is meaningless to speak about it separately from the dynamics that surround and interpret it. Similarly, in evolutionary terms, the ‘actual’ organism and its life in relation to its environment can be seen as an analogic code for the interpretive processes of evolution, the way that DNA, or more properly, a lineage, alters in response to the environment as it is mediated through the sign of the organism.

Hoffmeyer and Emmche refer to the lineage as a “‘semi-transcendental’ autonomous historical subject”.291 Whilst the lineage can certainly be comprehended as an interpretant, whether it is a self or subject is debateable. Even so, it is apparent that both processes that may be seen as ‘selves’ and those that might not, involve interpretation; interpretation is not limited to living systems. Of course, this all reflects back on the prior discussion of hierarchy theory; the problem of the

289 Ibid., p 7.
290 Jesper Hoffmeyer, Signs of Meaning in the Universe, p 50.
relationship between dynamic and structure is relevant to processes generally, not necessarily only those associated with living systems or selves.

The relation of the concepts of analog and digital becomes clearer in a paper by Lemke which discusses the triadic sign in relation to the work of Salthe, particularly the three levels paradigm, with the middle level, L, or the level under observation, being understood as the level that mediates between constituents (L-1) and boundary conditions (L+1). Lemke uses “a variant of Peirce’s…semiotics in which a basic distinction will be made between categorical meanings and meanings based on continuous variation” to understand the semiotic relationships that are possible between levels. He distinguishes between topological and typological semiosis, essentially the difference between analog and digital coding, and looks for the way that these two kinds of semiosis are mixed in dynamical systems. Thus he formulates two principles, the principle of alternation and the principle of emergence.

**The Principle of Alternation:**

*Each new emergent intermediate level N in a complex, hierarchical, self-organizing system functions semiotically to re-organize the continuous quantitative (topological) variety of units and interactions at level (N-1) as discrete, categorical (typological) meaning for level (N+1), and/or to re-organize the discrete, categorical (typological) variety of level (N-1) as continuously variable (topological) meaning for level (N+1).*

**Principle of Emergence:**

*A new level in the scale hierarchy of dynamical organization emerges if and only if a new level in the hierarchy of semiotic interpretance emerges.*

Lemke’s justification for invoking this mode of translation is that a mapping of continuous variation onto continuous variation, or of one discrete set onto another.

293 Ibid., p 10.
294 Ibid.
would not provide much potential for novelty; the former would be more like redescription and the latter tantamount to renaming. He maintains that alternation can account for

A *semiotic transformation* of the information content of lower levels as signs for higher levels, allowing *many-to-one* classifications and *one-to-many* context-dependent re-interpretations.\(^{295}\)

This is easier to imagine through examples, and Lemke names such examples as the (discrete) firing of motor neurons becoming organized into (continuous) smooth muscle action, and (continuous) smooth motor behaviour becoming organized as (discrete) visual and verbal signs.\(^{296}\) This seems to fit well with levels in a hierarchy being separated by scale, particularly temporal scale; spatial or temporal distance can mean that continuous phenomena are construed as discrete, such as in threshold effects, or discrete phenomena are construed as continuous. Indeed, “[w]e should not be surprised that what look at the more micro-scale look like discrete units appears from a more macroscale perspective as continuous variation.”\(^{297}\) Phenomena are construed as something else by a system of interpretance, which Lemke locates at the level of (N+1); the recognition that results in the emergence of level N is in relation to the needs of (N+1).

At this point in this discussion, reflecting on hierarchy in this way might seem like an obvious point; in a sense it returns us to the same problem. Yet Lemke clarifies something that is not all that evident in Hoffmeyer’s work; analog and digital describe the fundamentals of change, and leads us toward that point that all change is *interpretation*, because all change occurs in relation. In light of this, dynamic and structure, or process and relation come to seem exactly the way this thesis has metaphysically presented them, as two perspectives on change. The more recent work of Hoffmeyer and Pattee has demonstrated this. Hoffmeyer is perhaps not aware of how he is in agreement with Pattee. In his justification of the concept of code duality in reference to the work of Pattee, he says:

\(^{295}\) Ibid., p 11.
\(^{296}\) Ibid., p 12.
\(^{297}\) Ibid.
But how does the semiotic dynamics of this hierarchical organization, i.e., its capacity for exercising cellular and developmental control, enter our understanding of the dynamics of living systems? Here I would suggest that Pattee's distinction between a dynamic and a symbolic mode (Pattee 1977) were broadened to cover also those less highly developed forms of semiosis which C. S. Peirce called iconic and indexical sign processes. The idea of the concept code-duality was to fill in the no-mans-land left by Pattee's distinction, since it implies that even the dynamic mode is basically a semiotic mode although based on indexical or iconic reference (i.e., analog coding) rather than symbolic reference (i.e., digital coding).298

The key phrase in this passage, that ‘even the dynamic mode is basically a semiotic mode’ gets to the heart of the issue, and makes sense in light of Lemke’s discussion of the three levels paradigm. It is important to keep in mind that this is actually a subtle point; the dynamic and semiotic are, of course, not ‘the same’, but rather the semiotic may be seen as the relational aspect of the dynamic. Depending on focus though, the dynamic aspect of the semiotic is also a process. This is clearly comprehensible through the terms process and relation, and inner aspect and outer aspect.

Pattee in fact seems to be pointing toward something similar.

The message is that life and the evolution of complex systems is based on the semantic closure of semiotic and dynamic controls. Semiotic controls are most often perceived as discrete, local, and rate-dependent. Dynamic controls are most often perceived as continuous, distributed and rate-dependent. But because there exists a necessary mapping between these complementary models it is all too easy to focus on one side or the other of the map and miss the irreducible complementarity.299

To clarify the concept of semantic closure:

The best understood case of an essential relation of upward and downward causation is what I have called *semantic closure*…It is an extension of von Neumann’s logic of description and construction for open-ended evolution. Semantic closure is both physical and logical, and it is an apparently irreducible closure, which is why the origin of life is such a difficult problem. It is exhibited by the well-known genotype-phenotype mapping of description to construction that we know empirically is the way evolution works. It requires the gene to describe the sequence of parts forming enzymes, and that description, in turn, requires the enzymes to read the description.\(^{300}\)

If all change may be described as differentiation, and through the terms analog and digital as presented by Lemke, such that dynamic and semiotic emergence are co-present, in the sense of entailing each other as inward and outward aspects, rather than being the same ‘thing’ or ‘process’ or ‘change’, then a self may be characterised by its simultaneous inner process and relation, and its participation in a broader dynamic, through which it is expressed as a relation. The potentiality that exists at the inception of a self may be thought of as, in a sense, an extra dimension, because of the possibility of simultaneous inward development in relation both to the boundary conditions surrounding it, as well as the boundary conditions constantly being formed by its relationship to its own history, in its semi-autonomy. The potential for this inward development lies in the coming together dynamically that occurs during fertilization of vastly different rates, or time scales. The DNA is ‘digital’ from the perspective of the organism’s life cycle, but may also be characterised in its inward aspect as a process occurring over a very long time span. Recalling the scalar hierarchy, which stipulates that processes occupying very different rates do not dynamically interact, the exception would be the point at which DNA is formed and begins to interact with the single cell. In this way, the closure that allows for semi-autonomy occurs, beginning a single process of which all other processes constituting the self is an opening inward. Whilst these concepts might begin to describe *that* this occurs, they do not really describe *why* this occurs, although from the point of view developed in this thesis, through both hierarchy theory and the broader process

\(^{300}\) Ibid.
philosophy, the underlying fact of change simply suggests novelty as basic, and the development and differentiation of DNA along with its combination with the much faster dynamics of the cell has occurred simply as a natural method of separating and combining in the production of ever increasing novelty.

The importance of defining a self in these terms is to bring us toward a concept that can be applied to the particular kind of inner aspect that occurs in some processes that we can call ‘life’, so that the human self can be seen as a natural progression in the evolution of ever more complex natural forms. Even though life might thus be differentiable from non-living processes, both should be characterisable through the same set of ideas. Indeed, defining a self by the kind of closure that has been described, and observing this closure at the level of the individual cell perhaps circumvents the need for strict definitions of ‘living’ and ‘non-living’. Lemke schematises increasingly complex systems, from ‘Elementary Dynamical Systems’ through to ‘Genetic Evolutionary Systems’ and ‘Ecosocial Systems’.

I hope it is clear that at no point in the specification hierarchy that we have been defining (complex systems with irreversibility, dissipative structures, developing systems, epigenetic systems) is there no clear transition to Life, as such. Hurricanes are alive in many significant ways; so is the Planet as a whole. Organismic life as we know it is based on a very specific strategy (DNA-mediated epigenesis), but ecosystems are also alive and use a different strategy.301

Lemke’s idea of ‘aliveness’ seems to be related to relative possibilities for development. Thus, the hurricane, as an example of a Dissipative Structure, or Dynamic Open System exhibits development, but not the inner relation that has been described in this chapter as pertaining to a self. “These systems develop, but they do not conserve the information acquired through interactions with an environment which shapes their development, nor transmit it to future generations.”302

301 Jay L Lemke, “Material Sign Processes and Emergent Ecosocial Organization”, online at http://academic.brooklyn.cuny.edu/education.jlemke/aarhus.htm, p 18, [Revised chapter for P.B. Anderson et al. (eds.), Downward Causation]
302 Ibid., p 17.
At the far end of the scale, Lemke maintains that “Ecosystems are individuals. Their biographies recapitulate during ecological succession…the trajectory of ecosystems of their specific type. Unlike organisms, ecosystems do not seem to die, but to undergo continual processes of local decay, replacement, and variable succession, resulting in a whole, a supersystem which is a mixed-age aggregate, a mosaic of ecological patches, each of which is itself an individual on a smaller space-time.” Whilst as complex systems, within large systems and formed of sub-systems, ecosystems might even exhibit the semi-autonomy that Salthe uses to define a self, whether they might properly be described as having the property of inner relation as well as inner dynamic that defines a self for this thesis, is debateable, particularly given the notion of ‘mixed-age aggregate’ that Lemke includes. There may be inner relations, self-description at various levels, but perhaps not at the level of the ecosystem itself. Similar questions might be asked of social and cultural systems; they might exhibit complex forms of semiosis and develop in the same way that some strictly ‘natural’ systems do (such as through the life cycle of a dissipative system), but should not be assumed to exhibit selfhood in the way it has been here described. Importantly, the abstract principles of change, through the duality of differentiation can still apply in situations that yet do not count as selves.

### Consciousness

Biosemiotics provides the basis of a theory for speaking about both nature and consciousness, yet the works engaged with thus far tend to address issues such as cultural and language systems rather than anything like the experience of consciousness, with the exception of Hoffmeyer. Unfortunately, the way that Hoffmeyer characterises consciousness in *Signs of Meaning in the Universe* is perhaps not entirely consistent. He invokes the metaphor of a swarm to describe the relationship between the ‘body-brain’ and consciousness, specifically the swarming behaviour of bees, a group of which behaves as one entity despite the individual bees having no knowledge of the whole, or intention as to the behaviour of the swarm. This is probably not the most effective metaphor to use. For instance, in relation to

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303 Ibid., p 20.
Lemke’s schematising of systems, whilst a swarm might exhibit system dynamics and behave as an ‘individual’ in some respects, it may be characterised as a dissipative system, and certainly does not exhibit the inner relation or description necessary for selfhood. In this way it is unlike consciousness. Hoffmeyer’s description of “the body as one swarming entity, the semiotic brain-body system as a whole”, appears to make the mistake of viewing ‘the body’ as an epiphenomenon, making the strangely reductionist seeming error of equating the level of the body with the dynamics of a different scale. His suggestion that we “look upon consciousness as a purely semiotic relation”, also seems to divorce consciousness and the dynamic and semiotic body.

Some of Hoffmeyer’s ideas are very much in alignment with those presented in this chapter, yet these are interspersed between statements about consciousness that seem to be at odds with his own thoughts. In relation to the sense of oneness apparent in the experience of consciousness, he makes the following remarks:

So where does this sense of oneness stem from? The obvious answer is that all of these brain modules or thought swarms are working together and interacting within one and the same body, a body which is at all times involved in one actual life, one true story. What I am trying to say is that even though consciousness is a neurological phenomenon its unity is a function of the body’s own historical oneness. *Consciousness is the body’s governor within the brain.*

What happens is this: during every second of a human life, the body is effecting an *interpretation* of its situation vis-à-vis the biographically rooted narrative which the individual sees him- or herself as being involved in at that moment. This interpretation is what we experience as consciousness.

This passage brings through the notion of consciousness as an epiphenomenon, ‘a neurological phenomenon’, which is problematic in its inability to account for consciousness in itself, as itself in its own scale of functioning. There is the suggestion of downward causation in the relationship of consciousness to the body, yet the term ‘governor’ is misleading. However the notion of the unity of

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305 Ibid., p 122.
306 Ibid., p 120.
consciousness being related to the body’s historical oneness is useful, as is the sense of the concept of consciousness as an interpretation in relation to both its own history and its situation. This preserves the double relation that was earlier held to be the defining feature of a self; an inner process (dynamic) and inner relation (history or semiotic), as well as an outer relation. However, Hoffmeyer’s explanation is still difficult to grasp, even aside from the problematic ‘swarm’ metaphor. This may be because without the terms ‘inner aspect’ and ‘outer aspect’, or some such similar terms, there is no way to understand the causal relationship between the unity of the body and the unity of consciousness. Thus, in Hoffmeyer’s expression here, the body seems like an actor making an interpretation that is separate from it and that constitutes consciousness; it ‘effects an interpretation’. It is much clearer and simpler to speak about the body as the outer aspect or relation and consciousness as the inner aspect or process; the body is the interpretation, in the sense of ‘the level between’ and the inner of this, its dynamic is consciousness, at the level of the body’s physical and historical unity in its present situation. Neither the body nor consciousness is privileged; they are the inner and outer aspect of the same process, the self, but they are different as they are different perspectives on change. It is not the body that acts, or interprets, and then consciousness follows, nor vice versa; the two are not separable. We might have a sense of ‘acting’ or ‘choosing’ through either, but there is always a unity experienced as the duality of body and consciousness, and this is always in the double relation to inner history and outer environment. This perspective will be elaborated upon through the rest of this thesis.

For the moment it is important to note that Hoffmeyer does mention the concept of interiority in relation to individuals, but without a very clear explanation of the relationship between interior and exterior, apart from the notions of closure expressed in various ways by the hierarchy theorists and biosemioticians mentioned in this chapter. In fact, in one figure, he describes biosemiotics as “mediator between man’s outer and inner natures”, although following this with “and, hence, between culture and nature”, which oddly opens up the concept of ‘nature’ but still places it in polarity with ‘culture’, a schematising that does not seem to do justice to the insights of biosemiotics. Nevertheless, more recently, Hoffmeyer sees interiorisation as fundamental to the formation of life, which he terms a special case of individuation, or ‘selfication’, and the development of more complex forms of interiority as
mediators between the inside / outside relationship. Or course, a major aspect of Hoffmeyer’s theory involves the place of language in the development of human life and consciousness, and the way that differentiation, or the concept of ‘not’ enters into this.

At this point, some remarks need to be made about the implications of this chapter, indeed this thesis so far. Using the concepts of inner aspect and outer aspect, and giving them a fundamental status is intended to allow for the full import of consciousness to be felt. It allows for us to begin addressing the immediacy of consciousness and in this sense its experiential completeness without creating a theory that privileges mind or the subject, because the perspective developed here begins with nature, and sees consciousness as emerging from it. According to the way that hierarchy theory and biosemiotics have been used here, particularly with the underlying process metaphysics, every process exists in relation; process itself describes an inner aspect, yet to begin to have a description of this inner aspect, the kind of closure describing a self needs to be present. Thus, consciousness is the inner aspect of the self at this particular level of evolution, indviduation and complexity that is the human being, yet such an inner aspect is certainly not limited to humans; all selves must have an inner that is different from consciousness only in degree. Thus, we might speak about forms of consciousness present in nature, without them having to be necessarily all that similar to our own. The inward directed interpretation characteristic of a self covers a broad range of situations. Nevertheless, for those organisms closer to us in evolutionary terms we might expect some kind of inner experience.

Viewing the concepts of inner aspect, outer aspect and self in this way allows for the acknowledgment that although we can create a consistent theory about the way that change takes place, through dynamic differentiation that is by its very nature, or in its outward aspect an interpretation, or a relation, everything that we observe is in the outer aspect. In this way, we can surmise dynamics or processes, and fit them together in comprehensible ways to create representations of the world and what happens in it, but the only process that we know, the only inner aspect that we can come into contact with is not simply consciousness, but for each of us our own consciousness. Importantly, the outer aspects or relations that we observe and describe are in no way
‘less real’ than their unknowable inner aspects. This allows for a perspective that can understand much about the way that change takes place, and define principles such that we might direct change in ways of our choosing, but it also, crucially, allows for the full appreciation of the mystery that exists everywhere around us, the unfathomable in all creatures and organisms. As the beginnings of a theory of nature that can support comprehension of human life and consciousness, this point cannot be overemphasised; one of the unfortunate outcomes of theory, in a sense any kind of systematising of the world around us, is that it necessarily focuses on sameness, such as the emphasis in hierarchy theory of the development through types. Although we can employ the term ‘individuation’, beyond the concept of this there are not really ways of appreciating or communicating about the uniqueness and mystery not only of human selves, but all ‘selves’, in which reality folds inward.
Chapter Five
Action

The theory presented thus far in this thesis, setting out an ontological base in process philosophy and using this to support an understanding of hierarchy theory, resulted in a view of consciousness as the inner aspect of the self as semi-autonomous system. The intention of theorizing consciousness in this way was to emphasise the uniqueness of each individual consciousness, ultimately relatable to the uniqueness of every process, yet situated in a systematic understanding of ontology, and processes of nature. In a sense, being conscious is for each of us the only immediate process; all that we observe is in relation. At a fundamental level, the concepts of inner aspect or process, and outer aspect or relation, should allow us to begin to make sense of the relationship between our experience of our own inner life and all the ways that we observe and interact with all that is outside of this inner life.

The point of such a view of consciousness is not to prioritise consciousness in the mode of idealism or subjectivism, with consciousness as a kind of immediately available truth, but rather to emphasise that for each of us we can both be completely within the process that is our consciousness, and observe relations by which we are positioned in the world. As mentioned already, the process of consciousness is always in a double relation both to accumulated history of the self, and outside circumstances in the present. Both being in and observing our own consciousness as a process, and understanding the causal relationships of this process with these two fundamental kinds of relatedness should provide us with the opportunity to deeply comprehend causality both as it has been explained thus far, in terms of the whole yet unfathomable nature of change, and its most basically observable mode, through the dialectic of differentiation, conceptualised in terms of inner aspect and outer aspect.

This thesis will now attempt to outline a theory of consciousness commensurate with these concepts. One of the most important tasks of such a theory is to take account of unconscious processes. Describing the self as one whole process encompassing the entire ontogenetic trajectory up to whatever point in time one chooses, or has currently reached, necessitates an understanding of how the past accumulates and is
literally present in the functioning of the inner aspect of the self that is consciousness as well as various outer aspects of the self, including the observable physical body. Obviously, according to hierarchy theory, the inner aspect that is consciousness is supported by innumerable lower levels, imaginable both in terms of the scalar hierarchy, such that our being in a consciousness is made possible by micro processes within the body, as well as the accumulation of information in various ways through the stages of our individual development. It was mentioned in the previous chapter that consciousness is the inner aspect of the self at the particular level of complexity that characterizes a human being. Unconscious processes thus should refer to all that occurs within the self as semi-autonomous system, differentiated as a self at the time of conception when the two vastly different time scales of DNA and dynamic cellular functioning come together. In this sense, unconscious simply refers to those lower level processes constituting yet dynamically and descriptively separate from the process of consciousness.

Speaking about consciousness in this way, and drawing on the concepts of process or inner aspect and relation or outer aspect can already begin to clarify that when we attempt to comprehend processes outside of our own consciousness, even those apparently within ourselves, imaginable perhaps as within our bodies or our histories, we are always observing an outer aspect or relation. Keeping such a point of view in mind is helpful with regard to the many ways that different disciplines such as neuroscience and psychology attempt to study and make sense of human life and functioning. For instance the attempts to probe and map various neurophysiological processes supporting or underlying consciousness will always be limited as a perspective on lower levels of functioning from the outside; only the observation of relations is possible at this level. It is reasonable to speak about neurophysiological inquiry as concerned with lower levels of functioning, both because of the attempt to isolate certain modes from others in the course of study and experiment, thereby not grasping the complexity of the inner aspect that is consciousness as a whole, and because such processes exist at a faster and therefore more micro level than the time frame of conscious experience, and thus may be assumed, with reference to a scalar hierarchical understanding, to be constitutive of the process of consciousness. Situating neurophysiology in this way, as indeed may be applicable to any physiological understanding of human life or study of the human body, does not
negate its contribution to knowledge, rather it acknowledges the limits of such modes of theorizing; they have the potential to contribute to understanding, but will never provide a complete picture.

If it is indeed the case that consciousness emerges as the inner aspect of our level of complexity, then it is reasonable to assume, as suggested in the previous chapter, that various organisms have an inner aspect both different from our own, but also in some way locatable as part of a continuum that could describe a transition to consciousness as we know it. Thus, even though it has been stated that all levels of process within the self may be termed unconscious processes, a theory of consciousness will be attempted in the remainder of this thesis that can comprehend those unconscious processes at a level immediately below conscious awareness.

Evidently we can create hypotheses about the inner aspect of organisms, particularly those that appear in ways similar to us, such as primates. However, as we can never directly observe any other inner aspect, more properly that we do not participate wholly in any other inner aspect, we can draw inferences regarding other organisms by observing the ways that the self as a semi-autonomous system as a whole interacts with the levels immediately outside, its general environment. Even though the self as semi-autonomous system collects most of the effects of its own functioning, it must yet relate outside of itself, somehow across its border with the world as its situation is of only partial rather than complete autonomy. Thus it may be said that the highest inner level of complexity as both border from the world and as level in itself, interprets lower levels in the context of the immediate environment such that the system maintains itself within acceptable limits of order and disorder. Processes are always adjusting depending on their own natural cycles in relation to constituents and conditions even though they do not dynamically interact with these other levels. Thus we might imagine micro processes in an organism resulting in a threshold of tension from which emerges a higher level process, eventually emerging as observable macro processes of behaviour through which environment and organism interact. This can be imagined in terms of situations of tension and ease, with the levels of tension of various processes requiring higher level action on the part of the organism. This will become clearer through this chapter, most particularly with reference to the work of Suzanne Langer.
The general point to be made leading into this discussion is that even in its semi-autonomy, any self, which would be all forms of life, must manage disturbance both in its environment and in its own constituting levels. The increasing differentiation that is possible in situations of semi-autonomy is somewhat paradoxical in the sense that more complex selves must find more complex ways of managing their distance from their immediate environments, particularly when there is a build up of tension within as well as more obvious perturbations relating to the external environment. This is particularly true given the double relation that defines the self, for the distance between the self and the world relates to the level of complexity of its inner development, which is in turn to a great degree dependent on its accumulation of historical information. The aim of this chapter, then, will be to discuss the two kinds of relatedness of the self; to immediate circumstances and to its own individual history, which, as outer aspects of the self, are differentiated from the inner aspect that is consciousness. Evidently, because the inner and outer aspects are differentiated, in a sense they define differentiation, they are not the same. This process of consciousness that each of us is in, is the interpretation of two kinds of relation and therefore we are situated within not simply a human \textit{umwelt}, but our own individual \textit{umwelt}.

\textbf{Relation to External Circumstances}

If the self is defined in terms of the double relation, and we maintain that less complex selves, even down to an individual cell, are not necessarily inside such an inner aspect as our human consciousness, then we might look at observable modes of action by which the border between the self and world is crossed, or more properly, levels at which the organism and its environment are involved in a single process. There is a certain paradox in attempting to imagine this level, given that, on the one hand such a level of interaction implies a broader process than the self, yet conversely the self as semi-autonomous engages with its own very particular \textit{umwelt}, making the level across which a given situation is engaged seem more properly internal to the organism.
With regard to the inner processes of organisms outwardly similar to us, yet not necessarily experiencing consciousness in the way we do, the central concern that might help us to understand the transition to consciousness, and our own inner processes below consciousness is to understand how kinds of behaviour might relate to inner processes that are not conscious. This concern is expressible in terms of tension and ease; we can potentially infer a state or phase of tension internal to the organism from its attempts to engage with its environment, eventually to infer our own inner yet unconscious processes by observing our own behaviour in relation.

Of course, and once again, there appears something of paradox in these considerations, as, particularly given our propensity to think in terms of substances, processes internal to the organism are most readily imagined as levels of physiological function. Relating physiological processes to behaviour that appears to exist at a more macro level tends to imply mechanistic and reductionist models of cause and effect. Thus, it is important to theorise processes internal to the self yet below the threshold of consciousness in a way that can take account of physiological processes and behaviour, yet also keep in mind that both of these are outer aspects of processes unknowable in terms of their inner aspect. Of course ultimately the intention is to move beyond such awkward terms as ‘physiological’ and ‘behavioural’ and one fruitful way to begin is to comprehend behaviour as action that releases inner tension in such a way that the entire process by which this happens might possibly be ascribable to an inner aspect of an organism, yet completely outside of any kind of consciousness like ours.

Action can be seen to relate levels below and above, or inside and outside of an organism. As already mentioned, the more complex the self, the greater the differentiation between levels inside and outside the self, and thus the requirement of more complex forms of action. Central to Hans Jonas’ discussion of animal life are the related concepts of tension and distance. He remarks upon the “primeval restlessness of metabolizing substance”, an openness to the world that he also describes as “irritability”.

Animal life is characterized by the means by which its degree of separation is bridged. Jonas thus outlines a ‘principle of mediacy’; “The

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great secret of animal life lies precisely in the gap which it is able to maintain between immediate concern and mediate satisfaction.” Sentience, emotion and motility are described as different manifestations of this principle.

If emotion implies distance between need and satisfaction, then it is grounded in the basic separation between subject and object and thereby coincident with the situation of sentience and motility, which equally include the element of distance. “Distance” in all these respects involves the subject-object split. This is at the bottom of the whole phenomenon of animality and of its departure from the vegetative mode of life.

Certainly the emergence of motility in animal life is a very different situation than that of plant life, which is largely contiguous with its environment. Space becomes a gap to be spanned, and a correlate of this is a deferment in time, which emotion spans. Yet the terminology chosen by Jonas perhaps misses the subtlety of evolutionary transitions, as well as projecting our human categories on vastly different selves. A ‘subject-object split’ appears less graded than the way that selves may be defined through a hierarchical perspective, and contains the suggestion of an inner aspect like our consciousness. Theoretically all processes face inwards, and all selves develop an inner aspect, yet how much the inner aspect of different selves resembles ours is unknown. Keeping this unknown status in mind can perhaps allow for more considered speculation on other selves, and levels such as plant and animal, such that we can comprehend the emergence of our human consciousness more deeply.

Thus, Jonas description of animal life begins to appear anthropocentric:

This precarious and exposed mode of living commits to wakefulness and effort, whereas plant life can be dormant. Responding to the lure of the prey, of which perception has given notice, alertness turns into the strain of pursuit and into the gratification of fulfillment: but it also knows the pang of hunger, the agony of fear, the anguished strain of flight. Pursuit itself may end in the disappointment

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308 Ibid., p 102.
309 Ibid.
of failure. In short, the indirectness of animal existence holds in its wakefulness the twin possibilities of enjoyment and suffering.310

Rather than assuming such a human-like inner aspect, it is worth exploring the possibilities in animal life in more neutral terms; assuming less about the inner experience of animals, even those evolutionarily quite similar to us, might provide insight into ways that levels below our own consciousness are animal-like. This allows for the possibility of complex behaviours, as many animal behaviours are, that are not conscious or are the outer aspect of a very different kind of consciousness.

Conversely, it is possible to extend a perspective of behaviour into the vegetative realm. Stephen Strasser makes some suggestions towards this in *Phenomenology of Feeling*.

Thus we must maintain that insofar as we are beings with skin we behave basically like vegetative organisms: we “involuntarily” seek to diminish that area of the surface of the body which stands in contact with an inadequate milieu by wrapping our limbs around one another and covering ourselves. On the other hand, we increase those areas of the skin which come into contact with those aspects that are suitable through stretching and uncovering…one would likewise have to consider the self-extension and stretching of the man comfortably sunning himself. The style of his behavior is falsely termed “animalistic”; one must characterize it as plant-like.311

Thus, even though Strasser maintains that there can be “no intention, no noticing and striving on the vegetative level”,312 he also describes the possibility of a rudimentary kind of pleasure and displeasure at the vegetative level, as functioning varies between the more and less optimal. This hypothesized pleasure he terms the ‘pleasure of an organ’, ultimately not so much to infer consciousness in vegetative functioning, or indeed in our modes of physiological functioning that he also sees as ‘plant-like functions’, but rather to place the possibility for consciousness, or his ‘intentional

310 Ibid., p 105.
312 Ibid., p 215.
level’, in “the forms of functioning which likewise show themselves receptive to higher contents”. Thus, he maintains, “it is not absurd to think that there are preintentional modes of behavior which belong to the specific possibilities of human existence.”

We might assume that the plant does not inwardly experience anything like the recognition of a goal, yet nonetheless engages in some kinds of purposive behaviour. Furthermore, his description makes outwardly directed behaviour of the whole self conceivable as simply the highest level of functioning. This begins to point us toward a perspective that can link various levels at which we observe relations, such as chemical, biological and behavioural.

Of course, biosemiotics has already provided a way of understanding meaning as inherent to every level, enabling us to conceptualise all change through differentiation as inherently interpretive, but this is not easy to imagine when we cannot conceive of the inner aspect of a process; essentially this is why it is so tempting to project our human experiences onto those of other creatures. The discussion up to this point has intended to clarify that purposive behaviour need not assume an inner aspect like ours, even though all selves, even down to the simplest forms, do develop inwardly in some way. Life at all levels involves various kinds of movements of the whole self towards or away from whatever is occurring outside, even before the emergence of specifically animal motility. Behaviour that might be observed, such as more complex forms of animal behaviour is simply a higher level of complexity of adjustment in relation.

Viewing behaviour in this way opens the consideration of how to conceptualise more complex forms of behaviour in the more simple form of cycles of tension and release, and the related concern of how we might redescribe concepts like motivation and drive accordingly. With regard to these two concerns, Suzanne Langer makes much headway.

313 Ibid., p 219
314 Ibid.
Animal Behaviour and the Concept of the Act

As part of her detailed work entitled *Mind: An Essay on Human Feeling*, Suzanne Langer challenges perspectives on animal behaviour that ascribe to it human modes of perceiving. Langer is able to do this by carefully setting up her view using the central concept of the act. Acts are recognizable elements in the dynamism of life. Even this basis fits very well with the theory explained thus far in this thesis; act denotes something observed and is a perspective on “the continuum of a life”, containing “peaks of activity which are centers of recognizable phases”.

They normally show a phase of acceleration, or intensification of a distinguishable dynamic pattern, then reach a point at which the pattern changes, whereupon the movement subsides.

One of the most important aspects of Langer’s characterization of acts is their reliance on phases of tension and release.

What gives every act its indivisible wholeness is that its initial phase is the building up of a tension, a store of energy which has to be spent; all subsequent phases are modes of meting out that charge, and the end of the act is the complete resolution of the tension.

Thus, even though the concept of the act can cover a vast array of situations, including, Langer maintains, intentional, involuntary and somatic acts, in plants as well as animals, this description is always some way applicable. Obviously an act may be “complicated in its build-up” or interrupted or reinforced in the duration of its process, but these may be described as more complex versions of the simple form.

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316 Ibid., p 260.
317 Ibid.
318 Ibid., p 268.
319 Ibid.
Langer maintains that “All animal and human movements take the form of acts”;\textsuperscript{320} and furthermore that the concept holds even in micro processes:

In plants as in animals, the vital activities subsume smaller and smaller events, yet biologists still recognize the basic indivisible act form, even where they are delving down to the biochemical factors involved in those complex processes.\textsuperscript{321}

Furthest down the scale, Langer suggests the term proto-acts for “events which belong to chemistry or electrochemistry as much as to biology”,\textsuperscript{322} and exhibit some but not all characteristics of acts, such that they may be seen to “foreshadow rather than present processes of genuine life.”\textsuperscript{323}

Inherent in Langer’s discussion of acts is the complexity of relations in living processes that makes it impossible to conceptualise causality in a simple and linear fashion.

Since acts are natural events of a highly variable, yet fundamentally typical form, it is not surprising that their causation by other acts as well as by non-vital, circumstantial events shows a comparably typical, complex pattern. The entire motivation of an act can never be summed up in a “motive”, not in several motives, although motives are important definable elements among mental acts…Every act arises from a situation.\textsuperscript{324}

Her concept of causality describes acts arising from the “matrix” of the “stream of advancing acts which have already arisen from previous situations”,\textsuperscript{325} through a basic causal relation she terms “induction”. Langer appears to be attempting to find a place for both relation in the sense of distinct acts or complexes of acts being more or less relevant to the induction of certain new acts, as well as the underlying wholeness of every situation. Such a view has a definite affinity with the conception of causality described already in this thesis; ultimate causality is always of the whole, but we

\textsuperscript{320} Ibid., p 266.
\textsuperscript{321} Ibid., p 267.
\textsuperscript{322} Ibid., p 273.
\textsuperscript{323} Ibid.
\textsuperscript{324} Ibid., p 281.
\textsuperscript{325} Ibid.
might identify causal relations as identifiable principles of change, or, in other words, acts that reliably and repetitively coincide with the induction of new acts.

It is difficult to speak clearly about causality in situations of complexity; there is perhaps always a need to select one discernible process to then attempt to identify constraints and conditions, a method that is always artificial in the sense of its separation from dynamic occurrence and that in itself will never reach the limit of possible description.

The only way an external influence can produce an act is to alter the organic situation that induces acts; and to do this it must strike into a matrix of ongoing activity, in which it is immediately lost, replaced by a change of phase in the activity. The new phase induces new distinguishable acts. This indirect causation of acts via the prevailing dynamic situation is “motivation”.326

The sense of impinging upon suggested in the external influence ‘striking into a matrix’ reminds of mechanism, yet the sense of indirect causation via dynamic situation suggests emergence in relation to the influence of conditions. Perhaps this is more comprehensible in the context of biosemiotics; even some kind of a physical impingement, say sensory, is an interpretation from the perspective of an already existent lower level process whether or not the ‘result’ is more readily classified as a change in the existing process or the emergence of a new level of process. Once again, identifying this difference is a matter of both differences in scale and description.

“Motivation”, then, is perhaps best understood through Langer’s work as the relation to a whole situation from which specific relations may be discernible so as to gain a more detailed description, but only in the sense of identifiable causal relations that are never ultimately explainable in terms of cause. If motivation is an entire situation, then it includes the ‘internal’ and ‘external’ environment, and, Langer suggests, the present and the past.

326 Ibid., p 283.
This overall causal relationship should also be kept in mind with regard to the concept of impulse. Langer uses the term as a simpler unit than the more problematic and indefinable term ‘drive’. She mentions that “An impulse is usually conceived to be a homogenous discharge of energy, the equivalent in animate nature of a force, or impetus, in the inorganic realm”.\textsuperscript{327} but she prefers to describe impulse as the ‘initial phase’ of an act, therefore an identifiable phase of the act, yet integral to it, in this sense preserving its complexity; “The first really identifiable element is the impulse; and this is already an articulated process.”\textsuperscript{328} Describing the impulse in this way also allows her to define the impulse as both a potential act and something that actually occurs, and it follows from this that for any fully articulated act at the level of behaviour, there are potentially numerous competing impulses at lower levels, supporting the conception of actual dynamic tension at a lower level, from which the given level interpretively selects in the context of higher level conditions.

Langer’s articulation of the concepts of act, motivation and impulse allow her to speak about animal behaviour in a way that particularly challenges our usual conceptions of relationships between animals and their environments. Animal behaviour is defined in terms of instinctive acts, acts that “are behavioral wholes from their beginnings”.\textsuperscript{329} Adaptation to conditions occurs in the “preparatory phase” of the impulse and the entire act follows from this.

In animal acts, the over-all tension is preformed in the impulse, and the act is apparently not controlled by an image of external conditions to be achieved, but by a constant internal pressure towards its consummation.\textsuperscript{330}

The sense of motivation as a relation to an entire situation also carries over into Langer’s discussion of animal perception. Perception is envisaged as always in relation to the animal’s positioning and action, and objects and their qualities “enter

\textsuperscript{327} Ibid., p 291.
\textsuperscript{328} Ibid.
\textsuperscript{330} Ibid., p 190.
into their perceptual acts only as they enter into their overt behavior as values for action”.\textsuperscript{331}

Thus it would seem that behaviour is not ‘triggered’ but deeply relational in such a way that makes somewhat obsolete concerns regarding whether or not behaviour is automatic. Behaviour as instinctual acts emerges or builds up from simpler modes of functioning in relation, “the matrix of trophic and somatic activity”.\textsuperscript{332} Instincts are “stereotypic actions, sometimes of considerable complexity”,\textsuperscript{333} common to individuals within a species, and varying widely across species. “The chief difference between the operation of an “instinct” and of organic behaviour is that the former is fitted to external conditions and requires extraorganic substrates or means”.\textsuperscript{334} Of course instincts may be modified or refined by their use and repetition in actual situations.

Langer outlines five types of species-specific acts, from the simplest “pure reflexes” through to “apparently purposeful, elaborate acts”,\textsuperscript{335} claiming these are all instinctive acts. Importantly though, their status as instinctive acts does not preclude them from being either performed intelligently or felt. “Animal intelligence is the perception of opportunities to perform instinctive acts without suffering any harm”.\textsuperscript{336}

Thus it is reasonable to describe behaviour as the relation of the highest inner level of complexity of the self, relating also to the internal or microprocesses of the organism. Indeed, the connection of the inner aspect of the self with the highest level of complexity is supported by Langer’s statement that “An organism always does everything it can.”\textsuperscript{337} Witnessing behaviour we cannot assume much if anything about the inner aspect of this highest level process, but when we observe kinds of behaviour without assuming inner consciousness, such as of goals or objects as we know them, the animal’s inner interpretation of itself in relation comes to appear more gestalt than additive of elements. This perspective facilitates the imagining of animal

\textsuperscript{331} Ibid., p 185.  
\textsuperscript{332} Ibid., p 172.  
\textsuperscript{333} Ibid., p 173.  
\textsuperscript{334} Ibid., p 174.  
\textsuperscript{335} Ibid., p 175-6.  
\textsuperscript{336} Ibid., p 176.  
\textsuperscript{337} Ibid., p 181.
consciousness in less usual ways. For instance, in her discussion of recognition of places, Langer mentions “what may be the most important feeling for space-construction in animal life – familiarity.” Assuming less about animal consciousness allows us to imagine differently, which further allows us to create new perspectives on the emergence of human consciousness. This point will emerge more clearly in the following chapters in relation to perspectives on emotion and feeling.

For the moment it is worth mentioning that this perspective supports the possibility that the most basic form of consciousness would be a gestalt, with the development of more complex forms of consciousness increasing possibilities for differentiation. Thus, finer differentiations in consciousness, such as in human languaged consciousness, select from an already existing gestalt rather than adding together perceptual elements. Such a conception shows up the inadequacy of using reductionist and mechanistic metaphors for understanding consciousness, and attempting to apply them in the search for the neuronal equivalent for singular perceptions.

The points taken from Langer’s work on animal behaviour and the concepts supporting this may be seen to describe rather than explain behaviour. We can only really speculate about how an organism comes to carry out a sequence of typical behaviour in its entirety the first time it is even tried. Langer suggests a ‘coded description’ for such instinctual acts, which fits generally with a biosemiotic viewpoint. She also maintains that “The course of the act, which may be an elaborate series of movements, is prepared by the creature’s developing anatomy.”

Furthermore,

Every instinctive act is motivated by a situation that is deeply prepared in the organism, by gene-controlled stages, to produce massive impulses to muscular action, intrinsically patterned in hereditary forms.

The ‘code’ of DNA is not static, but rather a very slow process, that sets a context for the much faster processes of cellular and somatic functioning. Thus, the body that

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338 Ibid., p 194.
339 Ibid., p 173.
340 Ibid., p 179.
forms as an observable outer aspect of this process of inward development is not a
code for kinds of behaviour; it is an outer aspect of the development of levels of
process in between the two very different time scales. In this way, the body is the
form of kinds of behaviour; the relation of a process. Whilst these concepts are not
necessarily easy to grasp, attempting to describe behaviour and the body in this way
can potentially facilitate the conception of behaviour and physiology as outer
perspectives on different levels of process; the mode of functioning is inherent in the
form, and the form is only observable because it is the outer aspect or relation of the
given level of process, providing the possibility for dropping the metaphor of some
kind of ‘data’ stored in a completed physical form in the DNA or elsewhere.

To summarise, a basic way of describing behaviour is as the way the self as semi-
autonomous system maintains itself as a whole through the constantly varying
situation, including lower inner levels and the more obvious environmental situation.
When adjustment of this kind is necessary for the self, it is assumed that these two
levels have reached a phase of contesting one another enough for the behaviour to
emerge. Even behaviour more clearly motivated by processes properly internal to the
organism, such as the phases of hunger and satiation, may be seen to contest the
‘external’ environment, as a phase of hunger changes the relation to the ‘external’
situation or environment such that it becomes one of increased tension that requires
behaviour to resolve.

The metaphor most fundamental to this conception of behaviour is that of tension,
adjustment and release. It is a general description of what occurs. We probably
understand the concept of tension in relation to our own inner experiences of tension,
physical or otherwise, but it should be kept in mind that speaking about behaviour in
this way does not require an inner aspect that is a consciousness of tension and release
in relation to a particular situation. We might imagine simply some kind of sense that
the current act fits, a sense of something needing to happen or that the right thing is
happening once an act is underway. Of course, this is completely speculative in terms
of animal consciousness, but, as mentioned previously it paves the way for the
emergence of an inner aspect as, initially at least, a gestalt, which will be described
through feeling in the following chapter, rather than a series of separate perceptions.
Langer makes the very interesting point that perhaps an animal feels the highest level of its functioning and behaviour, and that as higher levels of complexity emerge through evolution these modes of experiencing are subsumed to a feeling of the higher level that has emerged.

That somatic acts we normally do not feel were felt in early epochs of our ancestry is certainly possible; at some time they were the highest activities of the archaic creatures…When the species progresses to more elaborate functions, particularly by the evolution of special sense organs, those new functions arise in the context of older ones which have settled into such perfectly habitual patterns that they are no longer felt. The total activity of the matrix has been raised to a higher level.341

Whilst Langer’s view of behaviour and its development from the basic concept of the act is a mode of conceptualizing that supports the concepts that are being developed in this thesis, her view of feeling is not commensurate with the way that ontology and its applicability to hierarchy theory have been discussed thus far. She defines feeling as a ‘psychical phase’ of an act, which does not go far enough in discriminating between the physical and psychical. As will become clear in the concluding chapters of this thesis, the concepts of inner aspect and outer aspect pay greater heed to their difference while explaining their relation at a fundamental ontological level.

The concept of tension and release through adjustment makes sense of levels of functioning, including behaviour, but in terms of the double relation of the self to inner history and outer circumstances, at this stage it refers only to the latter. In view of the discussion of motivation, outer circumstances are the situation, and this includes levels ‘inside’ the organism. Thus, outer circumstances is better expressed as situation. However, the relation to individual history still requires clarification.

**Relation to Individual History**

341 Ibid., p 260.
Obviously, the relation of a self to its individual history is in a sense limited to
description, yet also present in some tangible way in present-time scalar functioning.
Indeed, there is something of a paradox inherent in the very possibility of
individuation; the greater distinctness of more complex selves requires the self to
collect most of the effects of its own functioning in a way that, particularly because of
the characteristics of the life cycle, is weighted towards early development. Much
order is established early on in a life, allowing the self to function as a differentiated,
semi-autonomous process, yet also meaning that the self functions in the present
through the past.

Thus, the distance of differentiation is in certain respects also a distance in time. At a
fundamental ontological level, of course, time is a way of ordering the very possibility
for any existence. In a sense the differentiation that defines existence itself is always
the formation of various *umwelts*, even though at some fundamental yet unknowable
level there is only the wholeness of change, implying a complete fit amongst
everything that does exist. Differentiation, as a limit that forms an inner and outer
aspect, forms an *umwelt* as outer aspect.

Because the self exhibits the special kind of closure that occurs when DNA and
dynamic cellular functioning come together, providing the possibility for inward
development, the DNA is the context for a new process; it is a very slow moving
process in itself, which acts as a set of conditions that encompasses the entire history
of the development of DNA. In this respect, all life is in relation to the entire history
of living processes. It should be kept in mind then, when considering individuation as
the accumulation of historical information of a unique individual, that this always
occurs in a context of the history of the species, and that in some way any organism
contains all processes of less complex organisms up to its own level of complexity.

In the context of the very long and slow process of adjustment of living, semi-
autonomous systems with broader processes, an outer aspect of which is observed in
DNA, it is not surprising that complex forms of behaviour are possible across the
borders between the inner and outer aspects of various selves. Finding the complexity
of behaviours that are possibly related to an inner aspect very unlike ours surprising
simply belies the strength of the illusion of mechanism that any process is simple.
Langer makes the telling comment about the “mechanisms of molecular integration in the evolution of organic compounds”, that the complexity of such processes is beyond the imagination of anyone who does not know some samples of them rather intimately; they grow up into self-sustaining rhythms and dialectical exchanges of energy, forms and qualities evolving and resolving, submicroscopic elements – already highly structured – merging and great dynamisms emerging.

Behaviour, then, is simply a higher level process, observed outwardly, than what we would usually term physiology. The fact of stereotypic behaviours that are apparently not learnt by the individual, described as instinct, is an expression of the process that is a given individual of a species; identifiable elements at lower levels and less complex but nonetheless living selves, also exhibit stereotypic behaviours, which are always both dynamic processes and interpretive of broader relations. Stereotypic behaviour is simply an example of repetition at a given level of complexity.

Indeed, the concept of repetition is basic to nature, as mentioned in Chapter Four, and expressible in relation to the ontology of the dialectic, as the dialectic of continuity and difference, a basic characteristic of the possibility of existence in the broader and more fundamental category of change. The tendency to repeat provides the possibility for the ever increasing development and individuation of selves. The concept of repetition may also be described in relation to dialectics; it points to a selection of type in the continual dynamic in which every existent process is utterly unique but recognizable only because it is of a type.

Thus, any organism is both type and token, and when we identify behaviours as stereotypic we are simply describing its recognizable way of being, which provides the possibility for its very existence but in no way reaches the limit of describing it. The basic principle of repetition in nature obviates the need for positing a ‘someone’ or ‘something’ separate that remembers and repeats behaviour; as the organism itself does not remember and know what to do in any way separate from the carrying out of

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342 Ibid., p 273.
343 Ibid.
acts, neither is the DNA some kind of separately completed instruction manual. In concert, recognizable processes tend to emerge between the two very different scales in time.

Of course, not every organism is born knowing everything it will know; instinctual behaviour can evidently adjust and develop depending on prior experience of the individual, prefiguring the types of learning made possible by human consciousness. The adjustment of behaviour that becomes patterned by an individual’s experience is probably most easily comprehensible in relation to the learning of physical skills. In addition to instinctual acts as wholes preformed in some way in the impulse or the beginning of the act, and drawing on the repetition that is a given species, Langer mentions instinctual elements. Her example is of basic muscular movements, such as the “thrashing, kicking and other typical movements of newborn babies”, and she says

Such short, unadapted, but fairly well-defined and repeatable motions are not strictly speaking instinctive acts, since they do not in themselves serve to negotiate the agent’s life in his ambient, but they are the instinctual elements out of which true instinctive acts are made by gradual integration, maturation and the molding forces of pressions from within and without. Instinctual elements, rather than a collection of “instincts”, compose a creature’s basic behavioural repertoire.344

The concept of repertoire formed of instinctual elements may be taken to suggest separate forms of behaviour with the possibility for many combinations, perhaps any combination, which detracts somewhat from the gestalt concept of instinctual acts. Perhaps it is more useful to describe the acts possible for organisms at certain stages of their development; Langer also mentions that “these muscular expressions are total acts”, as “avenues of impulsive discharge”.345 This would mean that some instinctual acts exist in potential form in individuals at earlier stages of development, as impulses to simpler acts that will follow a predictable path of development given an appropriate environmental context, such as exposure to the behaviour of adults of the same species. This is comparable to any other form of development of the individual

344 Ibid., p 179.
345 Ibid.
through stages; certain kinds of change are entirely predictable given the right conditions for individual development.

The point of this discussion is to provide a basis for the view that human learning is related to repetition, the tendency of any natural process to take habits, mentioned in Chapter Four, which is in turn found in the basic ontology of the dialectic of differentiation, identifiable in this regard as continuity and difference. The possibility for more complex levels of differentiation, and the existence of more complex selves, requires more complex forms of repetition. Yet even the most complex forms of human learning may be comprehended as forms of repetition, imaginable in the same way that we readily accept that physiological processes, and many other natural processes for that matter, exhibit repetition in rhythms and cycles. Once again, these points are mentioned to facilitate imagining kinds of ‘learning’ or ‘repetition’ related to animal behaviour that does not necessarily rely on an inner aspect much like human consciousness.

**Tacit Knowing and Indwelling**

Michael Polanyi’s work on the concepts of tacit knowing and indwelling provides a way to conceptualise different kinds of knowing such that we can begin to imagine how we might learn and perform complex behavioural acts without an explicit awareness of the details of our behaviour, providing a link to forms of animal action and awareness. Polanyi takes some inspiration from Gestalt psychology and its view of “tacit operations” in the understanding of wholes. He extrapolates from the processes of perceptual integration to the “logic of discovery”. Thus he is interested in scientific discovery and knowing, but also in its similarity to and basis in other kinds of knowing, in particular, tacit knowing.

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347 Ibid.
Tacit knowing relies on “two kinds of awareness – the subsidiary and focal”, which he explains are “fundamental to the tacit apprehension of coherence”.  

The essential feature throughout is the fact that particulars can be noticed in two different ways. We can be aware of them uncomprehendingly, i.e., in themselves, or understandingly, in their participation in a comprehensive entity. In the first case we focus our attention on the isolated particulars; in the second, our attention is directed beyond them to the entity to which they contribute. In the first case therefore we may say that we are aware of the particulars focally; in the second, that we notice them subsidiarily in terms of their participation in a whole.  

Polanyi uses the term ‘proximal’ to refer to those parts that are subsidiarily known, and ‘distal’ for that which is focally known. Tacit knowing rests on the relation of the two.

In subordinating the subsidiary to the focal, tacit knowing is directed from the first to the second. I call this the functional aspect of tacit knowing. Since this functional relation is set up between two kinds of awareness, its directedness is necessarily conscious.  

Tacit knowledge may also be expressed as implicit knowledge, something actual and present in some way to awareness, yet which “cannot be explicitly stated”. According to Polanyi, tacit knowledge underlies all other knowledge.

Now we see tacit knowledge opposed to explicit knowledge; but these two are not sharply divided. While tacit knowledge can be possessed by itself, explicit knowledge must rely on being tacitly understood and applied. Hence all

348 Ibid., p 140.
350 Michael Polanyi, “The Logic of Tacit Inference”, p 141.
351 Ibid.
knowledge is either tacit or rooted in tacit knowledge. A wholly explicit knowledge is unthinkable.352

Perhaps the main characteristic of tacit knowing is that it is integrative without being additive. At the same time, there is some tension relating to his claim that the subsidiary is a mode of awareness, perhaps simply because his analysis of the ‘from-to’ structure of tacit knowing assumes some particular from which we focus, as though we already know it, when he maintains essentially that we cannot know it separately from its participation in the gestalt that is tacit knowing. Apparently, though, we may be aware of the establishment of tacit knowing to varying degrees.

I have spoken of the subliminal clues of tacit knowing which cannot be experienced in themselves and of marginal clues which, though clearly visible, may not be identifiable. But we have now met a number of instances where tacit knowing integrates clearly identifiable elements and have observed the way the appearance of things changes when, instead of looking at them, we look from them to a distal term which is their meaning.353

Polanyi also mentions that when we attend directly to the proximal term, it loses its meaning. ‘Subliminal clues’ are defined by our not being able to experience them, described by the example of, in the case of visual perception, the “contraction of my eye muscles or the stirring of my labyrinth organ”, whilst marginal clues refer to those clues we might notice if we choose to, such as objects that frame the perceived object or are present in out peripheral vision. The kind of awareness that characterizes the proximal or the subsidiary does not seem to be entirely clear.

These concerns might be clarified somewhat with reference to his concept of indwelling, which may be seen to encompass his basic view of the “structural kinship of the arts of knowing and doing”.354 Indwelling appears to describe both the immediacy with which and the tacit nature by which we know our own bodies, but also that our understanding of anything is related to the way that we ‘interiorize’ it for

352 Ibid., p 144.
354 Michael Polanyi, "Knowing and Being", p 134.
ourselves. The concept of indwelling seems to emphasise the dialectical nature of knowing and being and is relatable to the concept of umwelt.

To this extent knowing is an indwelling: that is, a utilization of a framework for unfolding our understanding in accordance with the indications and standards imposed by the framework.

Indeed, indwelling is built on the concepts of interiorizing and exteriorizing; tacit knowing appears to be the means by which we create meaning by bringing something into our own very personal sphere of awareness in a way that yet remains implicit. “We shall then say that we endow a thing with meaning by interiorizing it and destroy its meaning by alienating it.”355 Polanyi's way of thinking definitely includes the way that positioning is inherent in all knowledge, and his view is reminiscent of the concepts of inner aspect and outer aspect; he claims that all observation is from the outside, and is therefore limited to the outer aspect of any given, observed process.356 According to this thesis, the correlate of the assumption that all observation is from the outer aspect is that of the sense of ‘being in’ our own unique, consciousness, the inner aspect of the self, and the concept of indwelling appears to approach this. However, without a basic ontology such as that outlined in this thesis the concept of indwelling is not always entirely clear.

The concept of interiorization is clearly related to the body:

To sum up, meaning arises either by integrating clues in our own body or by integrating clues outside, and all meaning known outside is due to our subsidiary treatment of external things as we treat our body. We may be said to interiorize these things or to pour ourselves into them. It is by dwelling in them that we make them mean something on which we focus our attention.357

355 Michael Polanyi, “The Logic of Tacit Inference”, p 146.
Perhaps it is simply Polanyi’s terminology that overcomplicates things; the notion of *dwelling in things* is not easy to grasp, particularly given the prevalence of visual perception in his discussions. Without a clear ontological basis, such as the concepts of inner aspect and outer aspect, it is difficult to know what exactly Polanyi means by claims such as that at all levels of knowing, from “our educational dwelling in the works of great men”, to “the biological study of plants and animals…At no stage do we cease to participate in the life of the individual under observation.”

The concepts of inner aspect and outer aspect can clarify that observation is always of the outer aspect, therefore we do not actually ‘participate in’ the life of another, but rather the process of observation may itself be seen as a broader process that sets a context for the inner aspects of both individuals. How this context is interpreted by another individual is ultimately unknown to us. At the same time, the concept of indwelling can be applied to a situation of observation of a different organism such that we have an implicit or tacit understanding of, for example, any other creature’s aliveness by virtue of our indwelling in our own aliveness, not by dwelling in the aliveness of the other. This is conceptually relatable to the history of evolutionary development mentioned earlier. Thus, we only really ‘dwell in’ our own process, this unique, inner aspect, but doing so gives us genuine understanding that is useful in higher level conscious processes that are essentially imaginative. Indeed, often when Polanyi describes indwelling, he seems to be describing imagination, or at least a process that involves some imaginative extrapolation:

> We know another person’s mind by the same integrative process by which we know life…*We experience a man’s mind as the joint meaning of his actions* by dwelling in his actions from outside.\(^{359}\)

Such imaginative extension clearly relies deeply on our very existence and all that we already know simply by virtue of existing both in the human form, but also in any form of a self at all, and this enables us to interpret all the relations we observe. As will become clearer through the remainder of this thesis, this perspective relates Lakoff and Johnson’s theory of metaphor with a process ontology.

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\(^{358}\) Michael Polanyi, “Knowing and Being”, p 136.

\(^{359}\) Michael Polanyi, “The Logic of Tacit Inference”, p 132.
Indwelling is perhaps most easily comprehended with reference to the learning of physical skills. Yet even in this context, the problem remains of our awareness with regard to the ‘from-to’ relation.

In a skill we have a set of elementary motions, integrated in fulfillment of a joint performance. These elements are the subsidiaries of this focal act. They possess a joint meaning in being co-ordinated to this common purpose. We are attending from them to their integrated result.360

It might be assumed that only much higher level skills are attained by integrating elements of which we are aware, and this is based on the gestalt forms of action that simply arise by virtue of our being in human form in a particular context. This is clarified with reference to the views of animal acts already discussed, potentially deepening our appreciation of the concept of indwelling. At the level of complexity from which animal behaviour emerges, knowing and being are not at all separable from each other, or from the hierarchy of processes that is the particular self.

Indwelling appropriately describes ‘being in an inner aspect’, yet any relation formed is interpretive and only describable as outer aspect; we do not really bring things into ourselves. Even when we participate in broader processes, all that is outside of our own inner process is construed as something for that process. We are always deeply positioned, both in terms of our species, but also in a unique and individual sense. This point will be further discussed in the coming chapters. For the moment it is worth further discussing indwelling and tacit knowing with reference to the gestalt nature of animal acts and animal perception. Polanyi states that

All animals are capable of tacitly integrating their bodily actions; indeed meaningful integration can be found in the very process of coherent growth.361

It seems odd that Polanyi is here clearly mentioning different levels or kinds of processes that would not be associated with consciousness or awareness, yet

360 Michael Polanyi, “Sense Giving and Sense Reading”, p 182.
361 Ibid., p 196.
maintains such a strong commitment to the presence in awareness of the subsidiary. Even though he is not referring explicitly to tacit knowing here, there is simply more to be said regarding how tacit knowing might have emerged as a process within consciousness from processes that are not conscious. In the case of animal behaviour, if animal perception is the way Langer has described, as values for action that never construe objects as such, then it is difficult to imagine the subsidiary present to awareness, or even whether this is a meaningful way to analyse a gestalt of animal perception. These points are relevant to a discussion of human consciousness as, if we assume that it is worthwhile to envisage a transition to human consciousness through various levels of animal awareness, they allow us to suggest a deeper concept of indwelling, that may perhaps be present in our own forms of action yet outside of our awareness, perhaps like another level of tacit knowing that is only really describable through the observation of our action, yet may also be conceptualized as adjustments emerging from tension in processes below those of consciousness.
Chapter Six
Human Action

The previous chapter was intended as part of a theory of a transition to consciousness, eventually human consciousness, set in the context of hierarchy theory, which was in turn set in the broader context of process philosophy, all of which both describe and take part in the concept of dialectics. Some of the views of Langer were presented as a context for a view of human consciousness that can think differently about action; situating ideas about human behaviour and consciousness within a discussion that considers animal behaviour more broadly was intended to encourage the consideration of ways in which human life and experience might be similar to animal life and experience, rather than projecting human categories of understanding onto animals, even those apparently quite like us. Introducing and questioning Polanyi’s views of tacit knowing and indwelling was intended to support a view of knowing as inherent in lived experience, based in various forms of repetition at various levels of complexity, in ways that do not necessarily presuppose awareness, reinforcing the validity of Langer’s approach. This all simply gives us tools with which to speculate that highly complex observable behaviour may not require an awareness at all like our human consciousness, with the implication that our human consciousness emerges as the inner aspect of a higher level of complexity than the presence of complex modes of engaging with the world. The point is not to deny any form of animal awareness, but rather to think clearly about the meaning of animal behaviour before speculating about possible inner aspects of this, allowing us to think more clearly about levels of human life that are not conscious. It is assumed that the theories presented thus far provide a background for a deeper understanding of the theorists around whose work this chapter will be centred, Pierre Bourdieu and Eliot Chapple, who are more specifically concerned with human action. The expansion of understanding gained by setting them in the context of previous chapters will once again reinforce the enormous potential of a general paradigm shift to a process ontology.

The work of Bourdieu may be introduced with regard to this argument for a more general paradigm shift, as whilst he does not outline an ontology for his views, he identifies the same needs for theoretical change as those upon which process
philosophy is broadly based. His fundamental orientation is to move beyond the 
subject / object dichotomy.

Of all the oppositions that artificially divide social science, the most 
fundamental, and the most ruinous, is the one that is set up between subjectivism 
and objectivism.362

The history of his thinking, and the way he often expresses this divide, is broadly 
through the traditions of phenomenology and existentialism on the one hand, and 
structuralism on the other. Craig Calhoun, Edward LiPuma and Muishe Postone note 
that “when Bourdieu was a student, French intellectual life was dominated by a 
seemingly binary choice between the towering figures of Levi-Strauss and Sartre.”363 
Bourdieu is concerned with social life and situates his ideas very much in the realm of 
social action. He objects to the manner in which subjectivism creates a transcendent 
subject, thereby locating all impetus and power for action within an individual, and 
conversely, the way that objectivism reduces people to automata acting in accordance 
with rules and logic they neither know nor understand.

For Bourdieu to move beyond what he sees as the rigidness and artificiality of both 
approaches requires him to develop a more relational mode of thinking. According to 
Johnson,

This requires a break with the ordinary or substantialist perception of the social 
world in order to see each element in terms of its relationships with all other 
elements in a system from which it derives its meaning and function.364

363 Craig Calhoun, Muishe Postone & Edward LiPuma: “Introduction: Bourdieu and Social Theory”, in 
Muishe Postone, Edward LiPuma & Craig Calhoun (eds), Bourdieu: Critical Perspectives, (Chicago: 
364 Randal Johnson, “Editors Introduction: Pierre Bourdieu on Art, Literature and Culture”, in Pierre 
Bourdieu, The Field of Cultural Production: Essays on Art and Literature, Randal Johnson (ed), 
Most importantly, Bourdieu is a dialectical thinker, both in terms of the concepts he creates and his own mode of theorizing. He is consistently concerned with both theory and practice.

This vision of things, that I am presenting in its ‘theoretical’ form, probably started out from an intuition of the irreducibility of social existence to the models that can be made of it, or, to put it naively, of ‘life’s profusion’, of the gap between real practices and experiences and the abstractions of the mental world.365

Bourdieu is not trying to undermine or discredit theoretical knowledge or deny the possibilities that emerge from it, but rather, he says, “to give it a solid basis by freeing it from the distortions arising from the epistemological and social conditions of its production.”366 Whether he means that theory can be freed from such distortions simply by awareness of them is not entirely clear, though he does suggest that it would already be a considerable step forward if all would-be scientific discourse on the social world were preceded by a sign meaning ‘everything takes place as if…’, which, functioning in the same way as quantifiers in logic, would constantly recall the epistemological status of such discourse.367

Thus, knowledge is always bracketed; it may be genuine but is always necessarily partial. Bourdieu is well aligned with process philosophy, as he does not seek absolute foundations, but rather explanations that are never immune to change; “many of my research strategies draw…inspiration from a concern to refuse the totalizing ambition that is usually identified with philosophy”.368

As mentioned, dialectics is present in his work in terms of his view of his own position as observer and theorist, and by extension the position of any observer, yet it is also present in his most central concepts, both enhancing explanation and creating

366 Pierre Bourdieu: The Logic of Practice, p 27.
367 Ibid., p 29.
368 Pierre Bourdieu: In Other Words: Essays Towards A Reflexive Sociology, p 19.
tension. This may be said for the various characterisations of the concept of habitus and its relation to the concept of the field.

A grasp of the habitus requires a general move away from absolute dualisms. Bourdieu contends that

This infinite yet strictly limited generative capacity is difficult to understand only so long as one remains locked in the usual antinomies – which the concept of the habitus aims to transcend – of determinism and freedom, conditioning and creativity, consciousness and the unconscious, or the individual and society.369

Such an orientation evidently fits well with a process view of existence, in particular the way that hierarchy theory has been characterized in this thesis. Furthermore, habitus is presented in terms reminiscent of hierarchy theory’s concern with dynamic and structure, which was interpreted in terms of the process metaphysics of identifiable change as the dialectic of process and relation. Habitus is described both in terms of an interpretive structure and as dynamic lived experience. Thus, one of the more formal definitions focuses on habitus as ordering principles, a system of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them.370

Habitus is in this sense a way that behaviour is ordered, and the principles of this ordering emerge in the early stages of life, fitting with the view of dissipative systems (of which the self as semi-autonomous system is one type), which have a high degree of informational entropy early in life; relations are at this stage open and pliable in readiness for patterning through repetition, from simple forms of repeated engagements with situations to more complex forms of repetition such as human learning. Bourdieu is clear that habitus is acquired through interaction, speaking of it

369 Pierre Bourdieu: The Logic of Practice, p 55.
370 Ibid., p 53.
as “a system of acquired dispositions functioning on the practical level as categories of perception and assessment or as classificatory principles as well as being the organizing principles of action”. Evidently The Logic of Practice refers here to a discernible logic in action. In a sense, the counterpart required for a full understanding of habitus, as such a logic, is the way this logic is lived. Bourdieu is concerned with describing how behaviour obeys regularities without being describable as the \textit{product} of rules; the logic is as much imposed as discovered, as with any description, but it is also genuinely present and the idea of the emergence of new levels with their own regularity is comprehensible in terms of hierarchy theory.

The logic in action, as practical sense, may be described as ‘making sense’, which is why Bourdieu associates the habitus with strategies, albeit not consciously conceived by the one acting. Thus he uses phrases such as the ‘feel for the game’ as a way of expressing the way that people will anticipate plays and moves, and act appropriately in what may be termed a summary fashion. Lived experience generates this possibility. As with the paradoxes underlying hierarchy theory, as a situation in which constraint offers the possibility for individuation and ever more complex forms, action is only possible because of repetition. Thus, “nothing is simultaneously freer and more constrained than the action of a good player.” Furthermore,

\begin{quote}
It is because agents never know completely what they are doing that what they do has more sense than they know.
\end{quote}

Cleverly, or perhaps strangely, sense carries two meanings. It refers to a logic that is essentially viewed from the outside. This logic might be thought of as the outer aspect of habitus, or habitus as a set of relations. The other connotation of sense comes through in phrases such as ‘feel for the game’, apparently referring to some inner experience or knowing on the part of the one acting. This is clearly not a conscious awareness of the details of behaviour, but something apparently more like a gestalt experience, such as a sense of carrying out the appropriate action in a situation. This is indeed similar to the way that animal awareness during instinctual acts has been

\begin{flushright}
373 Pierre Bourdieu, \textit{The Logic of Practice}, p 69.
\end{flushright}
imagined; as some sort of sense of fit. Ultimately, Bourdieu does not really theorise
this ‘sense’ in any detailed way; he is not centrally concerned with the inner
experience of the person acting, but rather with the social and situational arising and
meaning of the actions of individuals.

The work of Polanyi as context for Bourdieu supports a deeper understanding of
habitus, specifically with the way tacit knowing has been presented here; a knowing
what to do that is not within awareness and may have emerged from repetitive
processes that were never explicitly conscious. The context of the previous chapter
therefore makes statements such as the following more comprehensible:

Practical sense is a quasi-bodily involvement in the world which presupposes no
representation either of the body or of the world, still less of their relationship. It
is an immanence in the world, through which the world imposes its immanence,
things to be done or said, which directly govern speech and action.374

Practical sense expresses belief through the body.

Practical belief is not a ‘state of mind’, still less a kind of arbitrary adherence to
a set of instituted dogmas and doctrines (‘beliefs’), but rather a state of the
body.375

This statement is directly relatable to the description of circumstances, as outer aspect,
using Langer’s concept of the situation; whatever is occurring within the body,
imaginable as competing impetuses to complete instinctual acts is an aspect of the
situation, as is whatever is occurring more obviously outside a self. Behaviour
emerges as tension is released through the fitting of actions to the broader situation.
There is no need to posit any more complex inner aspect or consciousness other than
possibly something like a holistic sense of something occurring, of actions fitting. The
most straightforward way of understanding this is through the concept of repetition.
For Langer, repetition is inherent in the form of a given species, which can be
understood as the outer aspect of tendencies to particular kinds of behaviour, whether

374 Ibid., p 66.
375 Ibid., p 68.
at lower ‘physiological’ levels or the more obviously observable ‘behaviour’ of whole selves. Conversely, for Bourdieu it appears that the habitus is completely acquired in the life of an individual.

In the context of the previous discussion of animal behaviour, Bourdieu’s habitus is more easily imaginable. As instinctual acts may develop through living, so does habitus, but it is worth mentioning that situating Bourdieu’s ideas in the context of natural processes and the transition through levels of complexity to consciousness suggests that an ‘acquired’ habitus must rest on the possibilities within the range that is the human form, a range of tendencies to behave in certain ways which are elaborated upon in the early stages of life.

The concepts of inner aspect and outer aspect can help to order the ways in which habitus is both observable and outside of consciousness. As mentioned, habitus is only observable as a relation, in action and from the outside. This is why Bourdieu places some trust in the theorist; the actor cannot know the true meaning of his actions. This accords with the view that habitus is at a level below conscious awareness; we are not ‘in’ it as we are in the inner aspect of our own consciousness; it is inside us but external to us. Furthermore, given the repetitive aspect of habitus and its instantiation in early life, it is describable as our relation to our own history; in a sense it is the outer aspect of our acting in the present.

Some problems do emerge with regard to Bourdieu’s views. There appears a certain cynicism in habitus, particularly in its completeness and resistance to change.

One is born into the game, with the game; and the relation of investment, *illusion*, investment, is made more total and unconditional by the fact that it is unaware of what it is.\(^376\)

This apparently complete and blind participation requires the self-deception of individuals. Calhoun, LiPuma and Postone mention that “*Illusio* is [Bourdieu’s] name

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\(^{376}\) Ibid., p 67
for the self-deception necessary to keep players involved in the game.\textsuperscript{377} This illusion or self-deception needs to be understood in relation to the concepts of the field and of symbolic power.

Habitus has been introduced in the context of dialectical thinking to highlight that understanding habitus requires comprehending it in terms of both dynamic and structure, process and relation. In a sense then, habitus is understood in two complementary ways. At a different level, though, it must also be understood in relation to the field, as forming in relation to and reinforced by various fields.

The concept of field is not entirely consistent throughout Bourdieu’s work.

Bourdieu’s initial elaboration of the concept of intellectual field (in the 1966 article ‘Intellectual Field and Creative Project’) was still excessively dependent on a substantialist perspective.\textsuperscript{378}

It is worth mentioning that the field originates in Bourdieu’s specific engagement with various intellectual fields, as well as the production of art and aesthetics in his own society. The concept is perhaps more easily captured in this context, for instance, as the field of literature, in which the production of a given text may be placed in relation to the possibilities provided by the whole of the already existing related texts (artifacts being the product of the agent’s choice of position), thus creativity in the presence of constraint, in a mutually constitutive and ongoing process.

The field might be generally characterised as a higher level cultural process than the behaviour of individuals. Thus, the habitus of individuals engaged with a given cultural process is constitutive of the field, but as an emergent process the field is also novel, as a higher level in itself, meaning that its effects, in acting as a context for the actions of individuals, are not predictable and extend beyond additive effects of a conglomerate of individuals. This interpretation is commensurate with the way that hierarchy theory was presented in Chapter Four.

\textsuperscript{377} Craig Calhoun, Muishe Postone & Edward LiPuma: “Introduction: Bourdieu and Social Theory”, p 41.
However, because a cultural process is not individuated from the world in the same way as a semi-autonomous system, it is more closely entrained to changes in constituents and conditions. Thus, a cultural process must have some degree of autonomy to even be describable in itself, as befits comprehension through the process of emergence, and therefore could possibly be described as following a cycle and having some inner momentum of its own, as any process must have. At the same time, however, the relationship of field and habitus cannot be said to be dialectical in the way dialectics has been presented in this thesis. To clarify, Johnson points out that the structure of a field

at any given moment, is determined by the relations between the positions agents occupy in the field. A field is a dynamic concept in that a change in agents’ positions necessarily entails a change in the field’s structure.379

If it is determined by relations, then it is not properly a process in itself, with its own inner dynamic. The view that changes in agents’ positions necessarily change the field implies a direct relationship of cause and effect, which is not consistent with emergence. If the field is nothing more than the sum of agents’ positions, then fields should not really be characterised as Bourdieu does, as relatively autonomous worlds.

These problems are at least partly related to the inherent paradox of dialectics. At an ontological level, the dialectic of discernible change has been characterised as that of process and relation, inner aspect and outer aspect. This means that processes at different levels cannot be said to be in dialectical relationship with one another. A change in the inner aspect of a given process, for instance at the level of habitus, necessarily changes all the relations of the habitus, its outer aspect. How this changes the field as a process in itself is not immediately known, but the effects, or the field as relation can be seen in the actual position taking by other agents, further giving some idea of the possible position taking that may have altered. As intimated in this point, from the perspective of the field, a change at this level also changes the outer aspect, the relation to all outside this process. But we cannot completely characterise any

379 Ibid., p 6.
process by its relations alone, through observation of the outer aspect, which returns us again to one of the key points of this thesis, that we are only ‘inside’ one process, that of our own unique consciousness. Neither the field, as a higher level cultural process nor the habitus as a level that describes action without awareness, are completely accessible to us. If we were to describe a dialectical relationship between the field, as the outer aspect, and habitus as inner aspect, this would miss something of the relative autonomy of the field. Similarly, if we describe the field as inner aspect and habitus as outer aspect, the even greater autonomy of the habitus, because of the dynamics of the semi-autonomous self would be lost.

The difficulty in explaining these dynamics is somewhat heightened by paying attention to the interpretive aspect of habitus, simply because habitus is within a semi-autonomous system, meaning that in some respects the possibilities of the field depends on an individual’s perception of the field. At the same time, of course, the field is a genuinely existent process, setting actual possibilities for position taking. There is indeed some paradox in the fact that a given field as higher level process, yet not individuated as only a semi-autonomous system can be, relates to the present but evidently not to its own history, despite the fact that history accumulates in artifacts. Yet the habitus must be characterised both by its relation to the field as an aspect of the situation, and by its relation to its own history, which sets up, at least somewhat, the way a field is interpreted. Evidently, these relationships are complex and difficult to theorise, yet this complexity supports the view that habitus and field affect one another, yet are not in a dialectical relationship at an ontological level.

These difficulties are somewhat ascribable to the fact that Bourdieu does not set out to define an ontology, even though any attempt to understand causality differently from the mechanistic, reductionist world view requires an explicit awareness of ontological assumptions. Without an understanding of processes at different levels, his theory tends towards what might be seen as human life from the perspective of the field. People come to appear conditioned by various fields in a somewhat simplistic way that does not pay enough attention to the dynamics of the individual, in itself, as a semi-autonomous system. This is evident in Bourdieu’s recourse to the concept of capital to explain motivation.
The impetus for various types of actions based on the projected outcomes summarized in the habitus is for Bourdieu related very strongly to the divisions of class. He maintains that people behave in such a way as to maximize the accumulation of capital. Yet his notion of capital is neither restricted nor reducible to economic capital, it being simply one form of capital among several. Capital is also expressed as symbolic power. Johnson remarks

Bourdieu thus developed, as an integral part of his theory of practice, the concept of *symbolic power* based on diverse forms of capital which are not reducible to economic capital.\(^{380}\)

The most often invoked form of this power seems to be symbolic capital, which Johnson refers to as the “degree of accumulated prestige, celebrity, consecration or honour”.\(^{381}\) Bourdieu says that

there is, therefore, a specific logic behind the accumulation of symbolic capital, as capital funded on cognition [*connaissance*] and recognition [*reconnaissance*].\(^{382}\)

Acquiring symbolic capital is thus based on receiving various forms of respect and reverence, and an important part of the capacity to maximise such capital is dependent on knowing what will evoke it in others, something that differs in different groups within a society. In this regard the concept of field becomes more tangible; people position themselves within fields in an effort to acquire symbolic capital. Thus the concept of fields as ‘relatively autonomous worlds’ coexisting makes the notion of class divisions *based not only on economic capital* clearer and makes some sense of the way that people acquire a sense of the requirements and possibilities of their own group through their lived experience.

The influence of Marxism on these ideas builds a critique of inequality into Bourdieu’s work, and indeed one of the more interesting aspects of this is that it

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\(^{380}\) Ibid., p 7.

\(^{381}\) Ibid.

\(^{382}\) Pierre Bourdieu, *In Other Words: Essays Towards a Reflexive Sociology*, p 22.
allows an understanding of the way that class permeates realms other than the economic in such a way that classes self-regulate, reproducing inequalities, and members act and in fact are constrained by the regularities that emerge (such as regularities of taste, political orientation and income) as the habitus is evoked continuously in individual members in interaction with their fields.

Yet there is a strange cynicism in Bourdieu’s ideas. Johnson says that

The idea that there are different kinds of capital which are invested in different fields of activity in accordance with the specific interests of the field in question (and of the agents involved) allows Bourdieu to develop what he calls a ‘general science of the economy of practices’, within which one can analyse ‘all practices, including those purporting to be disinterested or gratuitous, and hence non-economic, as economic practices directed toward the maximising of material or symbolic profit’.  

This reminds of the concept of *illusio* mentioned earlier, and a certain tension between the way that Bourdieu attempts to reposition theory in relation to practice, yet ultimately renders people unaware of themselves, implying greater acuity in the theorist observing from the outside. Behaviour is explained in a rather simplistic and individualistic way; even though agents know not what they do, let alone why, what actually moves people is simply an attempt to get what they can for themselves. There is little sense, either, of symbolic power being somehow in the interests of the group, except perhaps in the very limited sense of efforts to ‘keep the game going’, albeit for ultimately individually driven reasons.

Of course, this entire chapter has carried the intention to theorise the possibility of complex forms of action without awareness, and Bourdieu’s concept of habitus has been introduced as a way of understanding human action in this regard. Thus, it is assumed to be true that to a great degree people are not aware of the meaning of their actions at this level below conscious awareness, and understanding this in relation to interactions with various fields is one useful perspective, yet theorising the reason for

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this through a relatively unexamined concept of individual motivation neglects the complexity of human life and in a sense ignores the meaning of what humans do actually experience.

Habitus should be understood not only in relation to various fields, but also in relation to conscious experience. Describing animal behaviour as it has been in this chapter was not to assume that animals that appear in some ways like us (or, for that matter, those that do not) have no inner experience whatsoever, but rather not to assume how much it might resemble ours. Obviously, as humans we do have conscious experience, and particularly given the way that the human self has been theorized thus far, the relation between habitus, as an outer aspect of consciousness, yet somehow internal to the hierarchical self, to consciousness, as the inner aspect of the highest level of complexity needs to be understood. This requires a much more nuanced view of human development and motivation than symbolic power can provide.

Bourdieu’s central emphasis on social and cultural processes, rather than individual processes, underlies at least in part the limitations of his theory already discussed. The need for a more subtle understanding of individual experience in the context of a theory of consciousness as it emerges from natural process is clear, and in this regard, Bourdieu’s ideas find a useful complement in those of Eliot Chapple, specifically Chapple’s Culture and Biological Man. Influence may work both ways between these theorists, as without the comparison to Bourdieu, his ideas could otherwise perhaps be misunderstood as being too reliant on biological explanations.

**The Rhythms of Interaction**

Chapple’s elucidation of human life relies heavily on concepts such as rhythm, pattern and interaction, as he prioritises the temporal aspects of human life over the spatial.

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384 Prior to the introduction of Chapple’s ideas, three issues are worth mentioning. Firstly, a gender bias comes through Chapple’s expression, which is perhaps largely attributable to his time and does not seem to compromise the quality of his theorizing. Secondly, and more importantly, the ideas that Chapple outlines in *Culture and Biological Man* do not appear to have been much taken up since its publication in 1970. The third point that requires acknowledging is that Chapple makes ambiguous statements on two occasions that may be interpreted as being racist. Whether he actually harbours racist inclinations is by no means apparent, and these instances do not detract from his overall approach, which otherwise embodies a neutral scientificity in its expression.
He takes us through a discussion of the human individual and then applies similar conceptions and terminology to an analysis of culture. His initial focus on the patterns and rhythms of the individual, strongly based in the physical body, in the first part of the book means that we carry this physical orientation through to our reading of the second part and its discussion of culture. In some ways Chapple may be said to commit to a biological viewpoint, yet he remains aware of this as one perspective.

The value of differentiating the communication field from the behavioural (in the biological sense) lies in the fact that each describes and analyzes the emotional aspects of the patterns (linguistic on the one hand, actions and interactions on the other) in very different ways. In communication this is done by semantic analysis, that is by trying to establish the phenomena to which the symbols used by the speaker refer; in interaction investigations, autonomic and skeletal muscle nervous systems (the autonomic controlling the hormones, endocrines, and so on which produce the various emotional states) are the “emotions” themselves. To talk about this area, one has to use awkward phrases like emotional-behavioural or emotional-interactional or, for that matter, autonomic-interactional. The purpose of so doing is to make clear the physiological reality that overt and observable patterns of action and reaction are not mere surface phenomena, unrelated to the overall functioning of the organism as a biological system.385

Clearly here Chapple is reaching toward the possibility of describing higher level human processes such as feeling, action and interaction in the same terms as lower level biological and physiological functioning. Although Chapple does not formally invoke hierarchy theory, he works with the idea that basic biological processes are elaborated through interaction in the sense of development of a system through increasing levels of complexity. It is this underpinning that allows him to speak of cultural processes in relation to, yet not reducible to, physiology. This eventually brings out some important insights about, for instance, personality, temperament, action and feeling that help to develop those underdeveloped aspects of Bourdieu’s theorizing, specifically regarding motivation.

Whilst Chapple does not use the term ‘self’ often, or ‘semi-autonomy’, his descriptions map well onto the systematized explanation of the life cycle of a semi-autonomous system, and the process of development and individuation that this entails. Chapple’s notions of basic biological processes becoming elaborated through interaction, with this development heavily weighted towards early experience, after which processes enter into a time of relative stability and lessening flexibility fits entirely with conceptions of levels of generality in the early stages of the life of a system, the emergence of increasing specificity through levels of complexity through periods of relative stability, and finally senescence. This is reasonably straightforward; the interesting facet of this alignment is that Chapple explicitly links biological processes, personality characteristics and observable modes of interaction.

Rhythm is the major concept pervading Chapple’s views, allowing for the apparently disparate realms of biology and culture to be similarly theorised. Chapple does not outline a general ontology, but begins at the level of the individual cell. Thus he states that

From the individual cell and its metabolic processes, its synthesis of DNA and RNA, to man as the total organism, the biological rhythms are the controlling factor.\(^{386}\)

Furthermore,

Since the evidence indicated that even the single cell has its fundamental rhythms, whether as a part of a multicellular organism or in an independent form, and a wide variety of the living body processes exhibit similar regularities, some way of synchronizing or coupling all these rhythms together is clearly necessary.\(^{387}\)

Chapple’s project may be described as to understand the organization of levels of biological processes in such a way that can, as mentioned, take account of broader

\(^{386}\) Ibid.

\(^{387}\) Ibid., p 28.
cultural processes. Cultural phenomena are described as a different order of phenomena, acting as constraining conditions:

Culture [is] the characteristic shaping of particular groups in such a way that they learn and practice common patterns which infinitely vary the underlying interaction (and activity) patterns so far discussed – these carrier waves which organize the biological rhythms. 388

Cultural patterning is understood as mediated by three dimensions, cultural sequencing, space and ‘communicative symbols’ or language. These dimensions “are not part of the emotional-interactional system of the individual; they provide the boundary conditions within which it operates.” 389 Of these three dimensions, Chapple appears to prioritise cultural sequences, as the “building block out of which more complex systems of human relationships are constructed”. 390 Cultural sequences are simply the way that interactions between individuals and amongst groups come to be ordered, becoming implicit, accepted and naturalized over time.

Each culture has a multiplicity of patterns in which first one person does something and one or more persons follow this action by another. Whether they be called rituals or manners or even “standard operating procedures”, they have in common the cultural sequencing of the actions and interactions of individuals. 391

Despite setting what may be interpreted as a broad hierarchical framework, in the sense of including consideration of micro ‘biological’ through to macro ‘cultural’ processes, Chapple is centrally concerned with the actions of individuals, with “understanding the properties of the factors controlling the adjustments (emotional and otherwise) of human beings to one another.” 392

388 Ibid., p 148.
389 Ibid., p 245.
390 Ibid., p 220.
391 Ibid., p 206.
392 Ibid., p 10.
In a similar way to Bourdieu, then, Chapple is interested in the way that the actions of individuals are patterned through interaction organized by higher level cultural processes, yet he maintains a much stronger commitment to the individual and is ultimately more interested than Bourdieu in linking these broader processes with processes internal to the individual. Thus, whilst cultural patterns provide the boundary conditions, Chapple would like to discover what individual actions might express about the internal rhythms of the individual.

Such internal rhythms might be described as processes that push us to action in the context of certain environmental conditions. Describing such processes, which we might of course imagine as occurring at myriad rates or levels, in relation to conscious experience is difficult, and their relationship is never completely clear in Chapple’s work; indeed as already mentioned, he admits the awkwardness of phrases such as “emotional-behavioural or emotional-interactional or, for that matter, autonomic-interactional.”393 Generally though, he tends to imply that although we act essentially to adjust these processes, the meaning of this action is largely unconscious; we do not experience the ‘rhythms themselves’, or know that our actions are an attempt to adjust them. Obviously, to really understand conscious experience, Chapple’s ideas need to be fitted into a broader theory that makes sense of our actual experience, and how this might be causally related to lower level processes that do not enter into conscious experience, in the context of a broader environment, also maintaining the novelty of conscious experience as a level in itself.

Chapple’s views benefit by being considered in relation to those on animal behaviour already presented in this thesis, particularly those of Langer. Chapple specifically theorises human action, yet comes up with a perspective that could begin to describe human action in a way that is similar to the action of those animals most like us in terms of level of complexity. As humans, we experience a particular kind of consciousness, made possible by levels of interacting with the world in complex ways, levels that both precede and support this kind of consciousness. From the perspective of this level, acting is a fitting in to an entire situation, in the way situation has been defined, including levels internal and external to the organism as a whole.

393 Ibid., p 15.
The inclusion of all levels in the hierarchy through which we might imagine the existence of an individual human being, from the micro scale imaginable in terms of physiology (recalling that this is necessarily an outside perspective), to the macro of various cultures, and including the condition of semi-autonomy, allows for comprehending human action as patterned by the broader influence of culture as well as maintaining a view of the individual as unique and internally consistent. This focus on the uniqueness of individuals is perhaps the major contribution that Chapple’s ideas can make to this thesis; indeed, Chapple maintains that uniqueness is a property of the individual cell, a claim that can even be extended in alignment with the ontology of this thesis, that all processes are inherently unique, simply because existence in itself requires taking a position, always in relation to all else that exists and therefore necessarily unique. This is an ontological claim however, and not directly observable. The uniqueness of the individual cell might be more easily comprehensible given that the cell exhibits the special kind of closure that provides for semi-autonomy and therefore the collecting of some kind of history. Chapple says,

Not only are circadian rhythms clearly identified for many demonstrable in the single cell isolated from the body, but there are significant differences in these rhythms between species and between individuals within species. The most striking finding is that, no matter what the species, individuals show the highest consistency in the regularities with which their rhythms manifest themselves. In other words, individual differences lie at the very heart of cellular constitution.394

Thus, uniqueness is a key characteristic even at the cellular level, much lower than that of the whole human being, providing for a sense of the radical uniqueness of each human, even from the time of conception. At the moment of birth, then, the already utterly unique human being begins the process of individuation through interaction.

394 Chapple does not actually give direct evidence for this claim. For the purposes of this thesis I am proceeding as if this were true to explore the possibilities generated by making such an assumption. Ibid., p 25.
The newly born arrives on the scene with a set of inherent biological rhythms, controlling much of his physiological and behavioural performance. As he grows older, these shift at different rates of speed to the circadian patterns of his social and climactic environments. From the moment of birth, interaction takes place.395

Chapple explains that, from birth, the child

learns to interact, to adapt his vocalizations and movements to the patterns of others…to learn to discriminate contexts and situations external to him in the finest detail and to learn to associate these with the language of his group.396

Furthermore,

Through similar processes, he acquires all types of patterned movements. He learns to manage a spatial distance from others and to follow a prescribed order in performing various activities.397

In such a perspective we can find a definite affinity with Bourdieu’s habitus, despite the quite different approaches of Chapple and Bourdieu. Chapple outlines the term ‘temperament’, in a manner much reminiscent of habitus:

In this book, temperament is defined as the occurrence of observable, emotional-interactional patterns, great and small, which are reactions to what some other person (or persons) is doing. They are properties of the individual, established at a very early age…they make up the characteristic ways in which particular personalities react to particular situations. They are repetitive and predictable.398

The characteristics of temperament, thus imagined through this outer perspective of physiological rhythms are nonetheless not limited to this biological perspective as they emerge and can be observed in engagement with others and the world.

395 Ibid., p 138.
396 Ibid., p 13.
397 Ibid.
398 Ibid., p 73.
Importantly, the rhythms and patterns expressed in physiology are individual, implying uniqueness, and elaborated in interaction, through living. This begins to suggest a relationship between habitus and rhythms of the body, and also the uniqueness of any given individual’s habitus.

Unique individuality as a central concept provides a crucial and tangible contrast to mechanism and reductionism, particularly showing up its inability to convincingly describe human life and human experience. The mechanistic viewpoint tells us that we are reducible to our parts. Thus to imagine our own bodies, the life and consciousness that we experience in them we might imagine organs, or further down the scale, cells, or perhaps we might even extend the division, as is appropriate in this theory, right down to individual atoms. At whatever scale we envisage these parts, they are essentially the same; there is no way to account for difference and diversity amongst individuals and types. Even if we can observe and describe differences, reductionism can offer no explanation as to how and why differences exist; indeed there is no sense that difference is even worth considering.

Thus, consciousness seems like an anomaly, not only because it gives us a sense of life in an essentially dead universe, but also because there are few appreciable differences amongst people at any scale internal to the individual. This is a key factor in generating the artificial divide between ‘nature’ or ‘biology’, and ‘culture’ or ‘consciousness’. It becomes difficult to imagine how such vast individual differences as ‘personal history’ might be somehow literally present in bodies that are generally understood as the same or at least essentially very similar. This encourages the separation of physical structure and content, leaving room only to imagine history as somehow stored or filed away in the brain. The possibility of habitus as a way of being in the world that is literally the patterns of the body in particular situations (albeit always from the outer perspective) emphasizes both the individuality of habitus, and that it occurs continuously and in relation to the environment external to the self. This suggests that as we might view lower level physiological response as describing a relational aspect of habitus, so might we also simply observe our outward behaviour in relation to illuminate another outer perspective on habitus. Even though we do not experience habitus directly, we are always acting and can reflect on our
actions from the outside, something that will be discussed in the final chapters of this thesis.

It is particularly in regard to the present discussion that Chapple’s contribution in light of Bourdieu’s ideas can become apparent. In describing the habitus, Bourdieu offers a view of individual history embodied in action, but without any detailed understanding of the actual acting body and consciousness through which the habitus expresses itself, his analysis is limited to a discussion of the habitus in relation to processes of a larger scale. This belies the incredible complexity of processes internal to the individual as a functional system, along with the possibility that, by the time the individual even enters the physical world, it can be seen already as a complex system attuned or predisposed to particular ways of interacting, responding to and incorporating experience, which further develops and individuates the personality and temperament.

Conceptualizing complexity and uniqueness in this way allows for a much broader and more detailed appreciation of positioning than that made possible by Bourdieu, who relies heavily on the positioning of class, and extends this reliance to symbolic capital as the only driver of behaviour. His awareness of habitus as heavily weighted towards early experience is inconsistent with his lack of exploration of numerous possible positionings other than class during this stage of development. The limitation of divisions and positions to class actually makes a similar mistake as that of reductionism in relation to the body mentioned earlier, assuming that within any given class, other existing groups or fields we might identify are equal, or at least insignificant in their effect on relations.

Chapple, on the other hand, allows for the full import of early primary relationships to be felt, and the way these pattern further interactions whilst instituting an understanding, as mentioned, of enough individuation at this early stage to resist a ‘blank page’ conception of the developing infant. Whilst there is nothing new in identifying early development within the family as crucial to a person’s later development and functioning, Chapple allows us to more easily consider the way these early instituted patterns are continuously formative of later patterns and experience, and actually present in the individual rhythms (though not reducible to
them). This will provide the basis for understanding the relationship between actual observable actions and felt interior experience, facilitating a deeper understanding of a completely lived habitus that gives us a sense of how situations should arise and play out, along with the perceived naturalness of our own temperament in relation to situations.

With this expanded view of habitus we can revisit and cast a slightly different interpretation over Bourdieu’s suggestions that the motivation for behaviour, expressed through symbolic power, or the recognition from others, is an attempt to better, or at least maintain one’s position. As mentioned, the more obviously Marxist terminology sometimes used by Bourdieu, such as the notion of ‘maximizing profits’ in the quest for symbolic power, creates a disconnected and self-interested individual that is out of step with his overall theory, particularly his suggestion of the embodiment of habitus. Yet when we include Chapple’s perspective, the picture begins to emerge of each human being simply seeking to fit into the world interpreted through a particular habitus. The reasons for some individuals’ attempts to better their positions becomes potentially much more nuanced, in the sense of which aspect of each individual’s very particular habitus leads them to seek some other position, but even when this does occur, the entire situation can be described in terms of an attempt to fit the whole organism in the world. This is, again, well described with reference to Langer’s view, allowing us to conceptualise in a quite straightforward manner that action simply adjusts tension between the inner and outer aspects of the organism as a whole, and the patterns by which the need arises to adjust and by which adjustment is made are both completely individual and heavily patterned by past experiences, including of course the patterns of behaviour that are inherent to the form of human beings, within the range of the species. Such fitting in may indeed be interpreted as a broader form of recognition than that described by Bourdieu, a recognition that both the individual and the world are as each person perceives them to be.

Motivation might be seen as simply a causal description of an entire situation, that is necessarily always changing, from the perspective of an individual human being. This might be related to Chapple’s description of each individual’s need for particular types and amounts of interaction, also describable as ‘personality’ and ‘temperament’. Whilst the human being enters the world with particular and individual rhythmic
predispositions, it is from the elaboration of these in interaction that experience, even self-conscious experience, emerges. In other words, the rhythms themselves seek certain interactions during certain intervals to sustain the individual through time. This perspective is the underpinning for Chapple’s understanding of ‘motivation’ or ‘drive’. He suggests that

Lack of awareness of the existence and all-pervasive quality of the biological clocks has resulted in many attempts to deal with the surfacing of behaviours derived from them by introducing explanatory concepts like “drive” or “motivation”.

The view expressed by Chapple makes motivation ever present and continually shifting depending on occurrences outside the self. Chapple suggests that to meet their own interactional needs, people are continually attempting to synchronize to one another’s rhythms. The way that he describes this is largely through a picture of the tempo of initiation and reception of interaction, particularly through conversation, although he does use other examples, particularly in addressing group dynamics. Essentially, people seek complementarity; the state of synchronization with another person or a group of people. Chapple is careful to distinguish the more everyday usage of terms like ‘compatibility’ from this attempt to synchronize rhythms:

Compatibility does imply complementarity, but it is strongly affected by cultural factors. Being compatible may merely mean people possess common interests though they may still fight like cats and dogs. Complementarity ignores these interests; it is limited solely to interactional synchronization.

Furthermore,

Even if each person gets the quota of interaction which his daily rhythm requires, he also is seeking interaction with his complements. Any old interaction will not do; he needs to utilize his endogenous rhythms of action and

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399 Ibid., p 57.
400 Ibid., p 74.
inaction, at a \textit{tempo} within the natural limits of his repertoire, and thus experience a maximum degree of synchronization by the other person.\footnote{Ibid., p 48.}

Thus, people interacting for any reason will attempt to synchronize to each other. Chapple remarks that this happens more often than we might expect, but that it does not continue for long at all.\footnote{Ibid., p 46.} Individuals also vary in their flexibility, or the range within which they are able to adjust their rhythms to another person. The use of this as a process conception of motivation or drive becomes clear with regard to attempts to maintain complementarity.

One thing is certain by way of conclusion. When complementarity occurs and the parasympathetic becomes activated (not in the more extreme reactions), the individuals experiencing it try to continue its state indefinitely.\footnote{Ibid., p 75.}

Thus we can begin to imagine the way that the seeking of complementarity is integral to dynamics of interaction; at one level of description we can even say that all acting can be seen as attempts to synchronize to one another, in the sense that this forms the underlying level of generality that is then elaborated into various situations, contexts, and the like, that are not reducible to attempts to synchronize. Given that complementarity fluctuates and is generally fleeting, much of the time we, as human beings, would be in a state of non-complementarity, which Chapple terms dysphasia. He also describes this state as stress, which he acknowledges as based in physiology; “in physiology, the integral relationships of these reaction patterns and their autonomic components are commonly referred to as responses to ‘stress’.” Yet he also redefines stress for his own purposes, simply “as occurring when two or more persons come together and an instance of asynchrony takes place”.\footnote{Ibid., p 81.}

The frequency of asynchrony supports the claims about the uniqueness of individual rhythms. Thus,
Most people try to adjust their rhythms to reach some approximation of synchronization. Since human beings differ remarkably in their basal rhythms, the looked-for complement (basally) may not be available.\(^{405}\)

Adjustment to others requires flexibility of rhythmic organization, and people vary in their ability to do this. This is well described within the conception of self put forward earlier. The constraints on early development need to be within a range that allows for the play of order and disorder; too much constraint early on will result in a fixity of rhythms that limits the possible contexts within which the system can survive.

The possibilities for interaction can also be viewed from the higher level perspective of cultural patterns, along the three dimensions of cultural sequencing, space and language. As already mentioned, Chapple appears to prioritise cultural sequencing as the rhythms of interaction amongst individuals and groups. The existence of such rhythms provides the possibility for bridging distance between individuals, and the dimensions of space and language may be seen in the same way. The centrality of rhythm in Chapple’s view may be interpreted as positioning time or tempo as more fundamental than space, which then provides the possibility for the creative organisation of time. Language provides further potential for the bridging of discontinuity in both space and time.

With regard to his concept of cultural sequencing, Chapple’s work intersects interestingly with that of Bourdieu, particularly in his use of the term labour and concept of the dominance hierarchy. Chapple says,

> Except for activities where only a single step is needed, the component steps of any cultural sequence can be assigned to more than one person. This is the division of labour, a term which, for the purposes of this book, should rather be called the division of cultural sequences. It prefaces and makes possible the cultural sequencing of individuals in dimensional form.\(^{406}\)

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\(^{405}\) Ibid., p 47.

\(^{406}\) Ibid., p 203.
It seems that all forms of interaction amongst individuals might be termed ‘action sequences’, even interactions such as “the stylized behaviours used in greeting a newcomer”.407 If the potential of any given action sequence to be divided is all that is required for the use of the term ‘labour’, then in a sense it is almost as though he is saying that all cultural sequencing is built on the division of labour. The value of highlighting this lies in its similarity to Bourdieu’s conception of the way that humans are formed into groups, along with their fundamental motivation: the seeking of symbolic power. Interestingly, as with Bourdieu, the connotations of the term labour are unfortunate in their relation to the capitalist mode of organization that separates labour so completely from other life activities. However, Chapple suggests a pervasiveness of ‘labour’ that is basic to human life. This all plays well into Chapple’s discussion of the ‘dominance hierarchy’, which is simply a way of ordering the requirements for activity, and particularly for the initiation of activity, as cultural sequences become more complex and groups become larger. We can perhaps begin to gain a better appreciation of the way that the division of labour, or any activity, proscribes both the more mundane aspects of what to do, how and when, but also creates positioning for individuals in relation to one another, all of which can come to seem natural and to fit expectations: Bourdieu’s ‘feel for the game’. Thus, Chapple gives a major role for a similar kind of power as Bourdieu: “The initiative and dominance variables develop early in the maturation process, and evidence from behaviour genetics indicates that they have genetic components.”408

Yet recognition has already been described more broadly as the sense of fitting in the world, and may be understood to both include the kinds of relations that a dominance hierarchy can describe, but also numerous other finely detailed possible positionings. We might simply say that people come to inhabit their position in such a way that their rhythms are attuned to undertaking various activities in relation to others that result in a particular interior state of being. That particular interior state of being may be viewed as a level below consciousness, but the fact remains that we are conscious beings, consciousness already having been theorised as the inner aspect of the highest level of our complexity, and therefore it is important to clarify the relation of lower levels to conscious experience.

407 Ibid., p 206.
408 Ibid., p 52.
Both Chapple and Bourdieu imply the power and influence of processes below our conscious awareness on our ways of being in the world. Langer’s work on animal behaviour upholds the complete naturalness of this facet of human life, and the way that it is part of the emergence of conscious experience like ours through the development and evolution of natural processes. This describes a transition to consciousness that is very much present in our actual lives, and may be seen to quite genuinely move beyond the distinction between the conscious and unconscious. This is further supported by Polanyi’s ideas on tacit knowing.

Bourdieu implies more absolutely than Chapple that we have very little experience of the actual dynamics with which we are involved, yet even he implies that we have a sense of what to do, suggesting some kind of interior experience. Chapple gives some room to experience, particularly with his inclusion of the ‘emotional states’ related to changes in internal rhythms (for instance, alterations in the autonomic nervous system). He even suggests that quiet reflection during times of non-interaction when the rhythms can stabilize can provide insight into the patterns of fluctuation.

Hence, one needs to take stock of the nature of one’s interactional system in those moments when emotion is minimal and contemplation possible. One may then have a chance of making environmental choices which force a change in one’s interactional system. Thereafter, one has to support such steps by learning to reinforce these interaction patterns which seem profitable and reducing or avoiding those others which perpetuate immobility. Though hard and unpleasant, yet it may still be possible.\(^409\)

Yet despite the suggestion of change through conscious introspection, throughout *Culture and Biological Man* Chapple refers often to the possibility of measurement, in the sense of measuring interaction rhythms. There is some suggestion that he means all types of rhythms that may possibly be measured, both within the body and in interaction with others. Thus the rate of certain physiological processes, along with say the timing of pauses and shifting attention in a conversation between two people

\(^409\) Ibid., p 146.
might be measured, apparently with the view to discovering ‘what is really going on’. Given the cultural context of the time of publishing (1970) the undercurrent of suggestions that such measuring will conceivably be possible by advances in technology is understandable, although the regular return to measurement is curious, particularly given the way that Chapple draws out the complexity of individual and cultural rhythms, and their co-engagement and influence so well.

Whilst both Chapple and, more explicitly Bourdieu are attempting a move beyond divisions of subject and object, both are concerned with scientificty, which is perhaps better expressed as a systematicity, in such a way that leads them to almost disregard what we do actually experience. This aspect of Chapple’s work appears particularly strange given the centrality of uniqueness. Without any sense of the importance of our actual experience, there is very little room for a meaningful experience of an individual self. Partly, such problems in the work of both theorists might be ascribed to the lack of a thoroughgoing underlying ontology that makes sense in a fundamental way of the relationship between consciousness and those levels below consciousness, and how such levels can be conceptually related to the physical body. For instance, Chapple speaks of emotion without clarifying its relation to these underlying rhythms that we do not directly experience.

The point of theorizing action in the way it has been thus far, before turning to conscious experience has been to emphasise that action, as complex modes of engaging with the world and each other, does not require consciousness like ours, and therefore provide us with better ways of understanding the meaning of action as the expression of a relation between inner aspects of levels below conscious awareness and outer aspects of the organism as a whole. Yet even Langer speaks about animal emotionality and such possible interior experiences as a sense of knowing that we might call familiarity. This implies an inner aspect like consciousness that begins as a gestalt, perhaps a sense of fitting in, essentially something like whether or what kind of action is currently required, that may then, in more complex creatures become further differentiated. The only way to really imagine such developments of consciousness is as feeling, which will be explored following a discussion of the relation between some kind of inner sensing and complex modes of engaging with the world. For this it is worthwhile to turn to the two terms ‘emotion’ and ‘feeling’.
Chapter Seven
Emotion and Feeling

It has now been suggested a number of times that consciousness emerges as the inner aspect of complex forms of engaging with the world, an experience that may be described as a sense of fit. Care has been taken to avoid using the terms feeling and emotion as much as possible up to this point, so that they might be discussed following the thorough exploration of action, before speaking about consciousness itself as an inner experience. This ordering of the discussion has carried the intention to explain complex forms of action as not necessarily experienced inwardly in the ways we might generally imagine, to support the claim that we are unaware of many of our modes of behaving, as suggested by both Bourdieu and Chapple. This is not to suggest that we cannot describe our own behaviour, but rather, as will be detailed in the coming chapters, that our descriptions are interpretations of inner changes occurring in relation to situations, which are themselves wholly interpretive. To explain this, it will be necessary to develop a hierarchical view of consciousness, with the key concept being that the languaged consciousness through which we experience so much of our daily lives, emerges from the lower level of feeling, which in turn emerges from changes and perturbations at levels below consciousness that propel us into complex forms of action.

It is important to clearly differentiate between the terms emotion and feeling, and worthwhile therefore to have an understanding of their separate etymologies. The word emotion originates from the Latin ēmōtiōn–em, meaning “of action”, or ē-movrē-re, from (ē) “out” and (movē-re) “to move”. Thus the term originally meant, literally, ‘to move out’.\textsuperscript{410} This is evinced in the earliest definitions provided in the \textit{Oxford English Dictionary}:

1. A moving out, migration, transference from one place to another.

2. A moving, stirring, agitation, perturbation (in physical sense)
3. A political or social agitation; a tumult, popular disturbance.\textsuperscript{411}

Only later did emotion come to be defined more specifically in relation to conscious experience:

4(a) Any agitation or disturbance of mind, feeling, passion.\textsuperscript{412}

Only much later\textsuperscript{413} was emotion more closely connected solely with feeling: “A mental ‘feeling’ or ‘affection’; as distinguished from cognitive or volitional states of consciousness.”\textsuperscript{414}

The etymology of feeling, on the other hand, springs from the association with the sense of touch, a context in which it continues to be used. The earliest definition is with reference to the verb ‘to feel’; “To examine or explore by touch.”\textsuperscript{415} This definition also developed into a more general association with consciousness

3. Passive experience; sensible proof; knowledge of an object through having felt its effects.\textsuperscript{416}

Later definitions connect feeling more specifically with emotion.

4(a) The condition of being emotionally affected.\textsuperscript{417}

Even though they have developed into somewhat mutually defining terms, there remains a difference, which is perhaps best highlighted by the continued association of feeling with sensing; when someone asks us what we feel, we turn our attention

\textsuperscript{411} Ibid.
\textsuperscript{412} Ibid., p 183.
\textsuperscript{413} This usage is reported as during the 1900s, although ‘rarely’ during the late 1700s, with the earlier definitions relating to the 1600s. The Concise Oxford Dictionary of English Etymology, Ed. T. F. Hoad. Oxford University Press, 1996. Oxford Reference Online. Oxford University Press, online at http://www.oxfordreference.com/views/BOOK_SEARCH.html?book=t27, retrieved 28/02/08.
\textsuperscript{414} The Oxford English Dictionary, Volume V, p 183.
\textsuperscript{415} The Oxford English Dictionary, Volume V, p 804.
\textsuperscript{416} Ibid., p 806.
\textsuperscript{417} Ibid., p 806.
inwards, as we might focus on another sense perception. Emotion, however, remains much more ambiguous. As will emerge more clearly in this chapter, whilst we might ‘feel’ emotions, we might also simply behave emotionally without the inner sensing of feeling. This latter point, that we may behave in one way, interpreted by others as revealing a particular emotional state, without our actually having an inner conscious experience, or feeling, that accords with the outer description is one of the reasons, indeed perhaps the most central reason, for the development of the concept of the unconscious. The possibility of both unconscious and conscious emotions makes theorising emotion all the more difficult. This chapter will explore the possibility that schematising consciousness and its relation to the world through the concepts of inner aspect and outer aspect can eliminate much of the ambiguity.

As is apparent from the definitions presented, the term feeling refers quite clearly to something that occurs within consciousness, whilst the term emotion has broader application, as befits it origins; it does not necessarily refer to a conscious experience. In the context of the way consciousness has been theorised thus far in this thesis, it may be said that feeling is a way of characterising the inner aspect of consciousness, this process that we are completely within, whilst emotion may refer to the inner aspect, in that we can associate emotion with consciousness, but also to the outer aspect, in that we may not always be aware of emotion. In the context of the previous discussion of action, the different etymologies of emotion and feeling make more sense, indeed highlighting the importance of making a clear distinction between the two terms.

Emotion may be considered a movement or perturbation, and the connotation of moving out that it carries fits easily with the concept of action, in particular the act as a whole process that contains from the beginning an internal pressure towards its consummation. In the context of the whole organism, this pressure can only be completely resolved by movements at the level of the whole body, requiring the organism to engage with its environment through behaviour. Given that complex modes of interacting with the world have been theorised as not necessarily requiring consciousness of the act itself, but rather, most basically, a sense that the action fits the situation, we might say the same of emotion, thereby explaining quite simply why
We do not always have a conscious experience, or feeling that relates obviously to what we are doing.

It is important to keep in mind the goal of moving beyond an absolute division between unconscious and conscious, a goal that aligns all the theorists discussed in relation to action, most particularly Langer, Polanyi, Bourdieu and Chapple.

Subsuming, in principle at this stage, the concept of emotion into the category of action, does not equate to the claim that emotion is wholly unconscious, as we must have some kind of consciousness to act at all. It only makes more apparent that emotion belongs most properly to the level constitutive of consciousness; it describes movement within the body, in relation to the situation, and may or may not emerge, by interpretation, in consciousness as feeling. Given that we are not directly aware of such movement, emotion is best described as an outer aspect or relation. This view of emotion is supported by theory from the field of neuroscience, specifically the work of Antonio Damasio and Joseph LeDoux, and philosophy in the work of Martha Nussbaum, and can offer a way of interpreting much psychological research in the theory of emotion. All these theories benefit from the schematising of inner aspect and outer aspect, arising from the underlying process ontology.

**Emotion as an Outer Aspect**

Keith Oatley, Dacher Keltner and Jennifer M. Jenkins provide a thorough overview of psychological approaches to emotion in their book *Understanding Emotions*. This overview draws on a multitude of theories and literally hundreds of studies. Whilst the authors are very even-handed in their approach and do not advocate one specific theory, they present emotion in a way that may be interpreted as overwhelmingly a perspective from the outer aspect; emotions are described primarily as relational, and when the inner conscious experience is discussed it is generally referred to either as feeling or as ‘the experience of emotion’. Thus, even though we might, in our everyday understanding in Western culture at this time, assume that emotion generally refers to something directly experienced, attempts to theorise emotion generally end

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up referring much more to behaviour than feeling, which makes sense in the context of this thesis. Emotions are observable in our complex actions, which are an outer aspect of a relation to an entire situation of which we are not consciously aware.

In their discussion of preliminary distinctions in definitions of emotion, Oatley, Keltner and Jenkins present a summary of definitions proposed by ‘leading theorists’. The earliest of these is William James, who made ‘bodily changes’ central to his view:

James, 1884  My thesis…is that the bodily changes follow directly the perception of the exciting fact, and that our feeling of the same changes as they occur is the emotion.419

Thus, for James, emotions are feelings of bodily changes related to the external environment. Whilst his view is somewhat similar to the view being developed in this thesis, the relationships between bodily change and feeling cannot be properly understood without a theory of the relationship between consciousness and the material world, including the body. At this stage of the discussion though, it is simply worth pointing out that whilst emotion here seems to be a kind of feeling, its relation to ‘bodily changes’ is not clear.

Of the eight definitions that Oatley, Keltner and Jenkins mention, only one other, that of Arnold and Gasson (1954) mentions feeling in relation to emotion: an emotion “can be considered as the felt tendency towards an object”.420 The other six definitions all refer to emotion in terms of relationship with the environment. Thus, for example:

Burnett & Campos, 1987  We conceive of emotions as bidirectional processes of establishing, maintaining, and/or disrupting significant relationships between an organism and the (external or internal) environment.

419 Ibid., p 28.
420 Ibid.
Lazarus, 1991  Emotions are organized psychophysiological reactions to news about ongoing relationships with the environment.

Frijda & Mesquita, 1994 Emotions…are first and foremost, modes of relating to the environment; states of readiness for engaging, or not engaging, in interaction with that environment.421

Oatley, Keltner and Jenkins offer this summary: “one may treat emotions, at least to start with, as multi-component responses to challenges or opportunities that are important to the individual’s goals, particularly social ones.”422

The theme of emotions as states of readiness to act and orientational and organizational modes of adapting to situations is continued in the book’s exploration of the evolution of emotions. Oatley, Keltner and Jenkins draw on the ideas of James, Charles Darwin and Konrad Lorenz, among others, to outline the perspective that “Emotions are species-characteristic patterns of action.”423 If this is the case, they maintain, then emotions should have biological bases, including “patterns of autonomic and central nervous activity, recognizable facial expressions, particular gestures and specific vocal tones”,424 which must be universal to humans.

The concept of the universality of certain patterns of emotion is controversial in psychology, and research into the cultivation, experience and expression of emotions in different cultures certainly finds differences, but at the same time, some cultural theorists of emotion assume some underlying similarity of emotions that are then differently elaborated in specific contexts.425 Thus, in the context of the discussion of action, certain modes of interacting with the world arise simply by virtue of our being in the human form, or more properly, our human form is the outer aspect of particular

421 Ibid., p 28.
422 Ibid., p 29.
423 Ibid., p 40.
424 Ibid., p 42.
action tendencies within a range. These may, however, be elaborated upon in the process of living.

Evolutionary approaches to the psychology of emotion tend to emphasise the notion of fixed, species-specific patterns, whereas cultural theorists emphasise the potential for difference: “For cultural theorists, the core of an emotional experience is found in words, in metaphors, in concepts that permeate the conscious experience of emotions. Emotions are discourse processes, and they are roles that we fulfil within relationships.”

Perhaps the major commonality for both the evolutionary approaches and the cultural approaches is that emotions relate outwardly. Indeed, Oatley, Keltner and Jenkins maintain that “human emotions evolved to become the bases of social relationships, which is the most important theme of this book.”

Of course, one reason that psychological research focuses on emotion in its outward manifestations, such as how expressions of emotion modulate social relationships, is its reliance on the experimental method that essentially relies on outwardly observable phenomena. Even though many studies do reflect on subjective experiences, and rely on ‘self-reports’, this is a notoriously murky area for those wishing to quantify results for objective comparisons. Oatley, Keltner and Jenkins admit that “one of the most difficult issues in the field [is] how to measure emotional experience…what determines the subjective feeling state associated with different emotions?” One reason for such difficulty is that our inner awareness is not a direct reflection of the complex modes of behaviour in which we are engaged. Oatley refers to a paper in which himself and Johnson-Laird put forward the view that “many emotional experiences have an inchoate quality”, and Oatley, Keltner and Jenkins mention that “Emotions can be vague and unformed with meanings that only become clear as we express them to others.” Here they are using the term emotion in a different way from most other uses in the book; they are really referring to feeling, to the inner

426 Keith Oatley, Dacher Keltner, Jennifer M. Jenkins, Understanding Emotions, p 76.
427 Ibid., p 55.
428 Ibid., p 186.
430 Ibid., p 386.
aspect associated with the much broader concept of emotion. Thus, it is not as though feeling, in the sense of an inner conscious state is not referred to in this overview; it is many times, yet often somewhat distinctly from emotion, as though feeling is an element of emotion. This does not adequately describe their relationships.

Some discussion of causality is present in Oatley, Keltner and Jenkins’ overview, emerging largely from neuroscientific perspectives on emotion. This is based on the differentiation of primary and secondary appraisals. Primary appraisals are “automatic emotional reactions to events and objects in the environment, which motivate rapid approach and avoidance responses.” Secondary appraisals “provide more deliberate, conscious, complex assessments in terms of such matters as what caused the event and what to do about it.” Thus, the difference between the two kinds may be characterised by the relation to conscious experience.

Neuroscience, with its concern with finding physiological correlations, particularly in the brain, for conscious experiences, has already been positioned in previous discussions as an outer perspective on a lower level, and thus deemed a limited perspective. Nonetheless, some of its findings can offer points in support of this thesis, particularly in the way that action has been described and in readiness for a discussion of a levels approach to consciousness as the inner aspect. With regard to the study of emotion, there has been much study of the limbic system. Paul MacLean, who was inspired by James Papez, placed the limbic system in an evolutionary hierarchy of emergence between two other regions of the telencephalon (part of the forebrain), the striatal region, also found in reptiles, and the neomammalian, or neocortex. Whilst the older striatal region is understood to support basic animal behaviour, such as foraging, hunting, forming social hierarchies, mating and migration, MacLean argued that the limbic system allowed for the increase of sociality found in mammals. This hypothesis was partly adopted and extended by Jaak Panskepp, who saw the experience of emotions as generated in the limbic system. He conjectured that various circuits within the limbic system give rise to particular emotional experiences and behaviours, which other animals also experience.

431 Ibid., p 170.
432 Ibid.
According to this conjecture, these are the original forms of consciousness. Each is associated with an urge to engage in a particular kind of action – to be encouraged in what we are doing, to escape, to fight, and so on. Each is adapted to circumstances that have recurred during mammalian evolution: making progress, danger, confrontation, and so on.433

This view supports the notion that consciousness emerged as the inner aspect of the process of the self at a level of complexity at which the self already engages in complex forms of behaviour, although it is not presented as a transitional view, as the forms of emotion are assumed to be “original forms of consciousness”, whereas the possibility of quite different inner experiences, more basic than differentiated inner feeling experiences, such as the sense of fit, provides a more gradual transition to consciousness. This is well supported by Langer’s speculation that evolutionarily less complex selves might simply experience the inner aspect of the functioning of their own highest level, and in this context it is reasonable to assume that reptiles, and even much more basic creatures have some kind of inner aspect or consciousness, albeit one potentially very different from our own.

It is curious that Panskepp’s view, inspired by MacLean’s association of the emergence of emotion in relation to more complex social interactions, associated the emergence of consciousness with less complex behaviour, such as escaping and fighting. If the circumstances in relation to which emotions arise are really, for instance, to continue with a current mode of action, to escape or to fight, then it would be difficult to ascertain at which stage of evolution to introduce the concept of consciousness, as reptiles engage in all such circumstances, albeit usually perhaps in less complex ways that are less open to elaboration through experience. If we posit emotion as essentially something observed in behaviour, as really a kind of action, then it should be perhaps ascribed to all animals. This is where the term ‘emotion’ perhaps begins to lose some meaning, as whilst we can easily observe complex modes of behaviour in animals such as reptiles that are not very similar to us in many ways, it is very difficult to imagine what their inner experience might be like. Furthermore, the term emotion still carries the connotations that link it with feeling. Even though

433 Ibid., p 146.
emotion has been presented as not directly felt, the fact remains that we only associate particular kinds of action, of which we may indeed have a related inner experience, with emotion. This will require further clarification. For the moment though, it is worth focusing on the primary and secondary modes of appraisal. This is best outlined in the work of Joseph LeDoux.

**Implicit and Explicit Appraisal**

In his book *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*, LeDoux argues that the conventional term ‘emotion’ covers a variety of experiences and responses that result from the functioning of different physiological systems in the body and brain and that they therefore should be studied separately.\(^{434}\) Thus, as Oatley, Keltner and Jenkins also mention, LeDoux questions the existence of a defined limbic system responsible for our entire emotional life.\(^{435}\) Even so, he does still focus largely on the anatomy of the brain in his exploration of emotion, in particular the fear system.

Through a discussion of some of the areas of the brain that have been discovered to play major roles in the responses and experiences involved with fear, LeDoux describes qualitatively different responses to potentially dangerous stimuli. Without going over his somewhat detailed description of brain functioning, LeDoux identifies the amygdala as one of the brain parts most influential in this system, reporting that all fear responses are generated through the amygdala with the stimulus being conveyed initially through the thalamus. The important point is that between the thalamus and the amygdala the stimulus may take one of two pathways; it may either move through the sensory cortex, meaning that the stimulus becomes represented to consciousness, or it may move directly from the thalamus to the amygdala, in which case no conscious awareness of the stimulus occurs. He uses the terms ‘implicit’ and ‘explicit’ to describe the different modes of appraisal, which correspond to the primary and secondary modes mentioned earlier.

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\(^{435}\) Keith Oatley, Dacher Keltner, Jennifer M. Jenkins, *Understanding Emotions*, p 147.
The more direct pathway that does not involve conscious appraisal of a situation has the advantage of efficiency of response. Information conveyed in this way is of a general nature and elicits a quick response to a potentially dangerous situation. If on the other hand the stimulus takes the pathway through the cortex, some conscious comprehension of the stimulus will occur and the response will be more specific and thereby more appropriate to the circumstances. Thus we may be startled by something, only to find a short time later that it is nothing to be afraid of. These two different types of responses form different types of memories, described as implicit and explicit memories.

Interestingly, then, the implicit mode of appraisal elicits a response, or an action, without our having any conscious perception of the situation, and this mode of appraisal occurs more quickly, suggesting a lower level of functioning. The concept of implicit appraisal offers support from the field of neuroscience for the way that action has been described thus far; there must be some kind of inner coordination of the whole system that is the organism to adjust our whole selves in relation to whatever is occurring, such as movements of the body away from a situation that induces a fear response, before we have conscious perceptions of a situation. Thus, the term ‘implicit’ refers essentially to something inferred inside the organism that we only know by our outward responses; we only know that something is happening inside because we are responding outwardly.

Of course we cannot know exactly the level of complexity from which an inner aspect that may be termed consciousness arises. The implicit appraisals occasioned by the fear system described by LeDoux may be seen as fundamental modes of understanding and interacting with an environment. Indeed, the very basis of animal motility probably arises from a need to move away from what is threatening and towards what is useful. A fear response such as being startled appears so automatic that it is difficult to imagine that a sense of fit, as some sense of appropriate action, necessarily occurs. At the same time, the coordination of the system as a whole that allows for whole body movements ‘away from’ implies some kind of being awake or alert simply in being able to respond this way. Some kind of being awake or alert might be a sense of fit in itself. However, whilst we might imagine this in a creature
such as a reptile, it is more difficult to imagine in the movements of a motile single
celled organism away from an environmental toxin. At this stage it is helpful to recall,
once again, Langer’s speculation that living organisms experience inwardly their own
functioning at its highest level of complexity. Thus, given that a fear response is so
important for survival that it prioritises movement over other inner functions, we
might see it as the highest level even in much less complex organisms than ourselves,
and at the very least remain open to the possibility that some kind of experience of the
inner aspect is occurring, experience in this regard meaning simply awareness of
being in a process. Whilst this interpretation might seem wildly speculative, it does
support the concept of the emergence of an inner aspect like our own consciousness
very gradually through the increasing complexity of stages of evolution, and preserves
the basic view that once life occurs, when the DNA and dynamic cellular functioning
come together and a self as a semi-autonomous system is created, some kind of inner
aspect also develops.

In terms of our own conscious experience, though, and the highly complex inner
development that takes place, it is important to understand not only implicit and
explicit appraisal, but how we might learn and repeat these through the processes of
memory. LeDoux explains that explicit or declarative memory is the scientific term
for conscious recollection, as opposed to implicit and nondeclarative memory. With
regard to emotion, and specifically fear, LeDoux defines his use of the term
‘emotional memory’ for implicit, fear-conditioned memory, and ‘memory of an
emotion’ for explicit, declarative emotion. Explicit modes of appraisal and memory
will be mentioned later in this chapter. As the focus remains at this point to
understand complex modes of action that occur without conscious appraisal, an
exploration of the way that implicit appraisals might be elaborated upon in interaction
and repeated through the forming of memories is required.

Whilst conditioning is often described in fairly mechanistic terms, LeDoux’
discussion of conditioning in relation to implicit memory is useful. Much of the
understanding of the fear system has come from experimentation with fear
conditioning, albeit in a large part through experimenting with rats. From this it is
extrapolated that we are born with a set of unconditioned fear stimuli; stimuli that will
automatically elicit fear the first time they are encountered. Yet fear responses are
also learned. This is known as fear conditioning and can occur with or without conscious knowledge of the conditioning stimulus; you may become automatically fearful of something without ever knowing why. Outside of experimental situations, one of the most important ways that fear conditioning occurs is through what is termed contextual conditioning. In terms of survival, contextual conditioning allows people to anticipate dangerous situations through forming a memory of the context in which the danger was previously encountered.

LeDoux acknowledges the power of the direct pathway between the thalamus and the amygdala; it appears much more difficult to undo conditioning of which we are unaware than that which has passed through conscious awareness. LeDoux says of this direct pathway that “its utility requires that the cortical pathway be able to override the direct pathway. It is possible that the direct pathway is responsible for the control of emotional responses that we don’t understand.”

LeDoux reports that we are not born with fully formed brains, but that our neurons grow and develop in our early childhood. The hippocampus is the brain organ that is assumed to be most involved with the formation of explicit memories. Some neuroscientists believe that this organ of memory is responsible for forming detailed memories in which the sensory and emotional experiences involved with an event join in one coherent memory. However we are not born with a functionally mature hippocampus, a fact that is often used to explain why we form few if any conscious memories before about age three. On the other hand, implicit memories may be formed, as the amygdala matures before the hippocampus.

LeDoux makes the telling point that the hippocampus, which, as mentioned, is assumed to be involved in the formation of explicit, long term memory, is somehow involved with the representation of details of situations. These details appear to be relational rather than separate and distinct; the hippocampus creates “a representation of the context that contains not individual stimuli but relations between stimuli.”

This fits with the way that the emergence of separate perceptions has been imagined.

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437 Ibid., p 205.
438 Ibid., p 168.
as the selection from a gestalt, rather than an additive process built from recognising elements. Yet this relates to explicit memory, and we therefore might imagine that the relations recalled in explicit memory emerge from the possibilities inherent in the implicit responses as gestalt appraisals of situations, and that the formation of implicit memories is simply the way that we tend to repeat implicit appraisals in particular situations. Evidently, without ever being explicitly aware of it, we enlarge the contexts in which implicit appraisals occur, simply through the process of repetition in relation to circumstances. Whilst we can eventually override these appraisals by the use of explicit memory, inhibiting action arising from the rapid responses of implicit memory, the implicit memories remain, as LeDoux mentioned, strong and difficult to undo. The concept of competing impulses to action that are then selected from in the generation of conscious experience supports this view.

The concepts of implicit and explicit memory and appraisal imply a hierarchical approach to consciousness. For despite being described as quite separate systems of functioning, they nonetheless occur within one individual. The actions of the rapid, implicit appraisals may be seen as constitutive of explicit appraisals, in the sense that explicit appraisal is of a given situation, which must include how the self is already responding both inwardly and outwardly. Furthermore, the claim that explicit appraisal can override implicit suggests a higher level of interpretation.

The concept of explicit appraisal refers definitively to an awareness. In this way feeling must be described as explicit as it is within our awareness. Yet, at the same time, feeling seems to enter into our conscious awareness through no choice of our own. In this way, we might be reluctant to describe feeling as an explicit appraisal, as it is certainly different from the way that we engage conscious perception, thought and explicit memories in processes of understanding the world and our position in it. Furthermore, feeling, as an inner aspect of the self, is not simply interpretable as the awareness, or inner aspect of the self acting, as much effort has been made to explain the view that we can act in complex ways without any awareness other than that we are acting, or perhaps that our action fits a situation; the push to action is conceptualised as at a level below that at which consciousness arises. At the same time, an awareness of acting would probably be best described as a feeling; this is really the only way to imagine it distinctly from the more explicit, languaged
consciousness. Evidently, a theory of consciousness needs to be constructed that can take into account the level of the self that is inside the self, yet outside awareness, and those levels that comprise consciousness, which has been termed the inner aspect of the self as one whole process. This will be attempted with reference to the neuroscientific view of Antonio Damasio and the philosophical theory of Martha Nussbaum.

**A Hierarchical View of Consciousness**

Antonio Damasio is a somewhat problematic theorist to draw upon, as he exemplifies in many ways the limitations of concepts that are not based in a process ontology such as the one outlined in this thesis. In *The Feeling of What Happens: Body, Emotion and the Making of Consciousness*, Damasio creates an essentially speculative theory of consciousness, albeit based in many neuroscientific observations. His views may be seen to constitute a hierarchical theory of consciousness, yet without a clear understanding of the ontological relationship between consciousness, physiology and the material world. Even if his ideas genuinely extend beyond those theoretically consistent with the ontology of mechanistic, reductionist science and fit with some of those already presented in this thesis, such as hierarchy theory, he does remain limited by the language and metaphors of mechanistic and reductionist modes of thinking. Nonetheless, his levels approach to consciousness, in particular his schematising of emotion and feeling, help provide a framework for conceptualising consciousness that is useful for this thesis.

Damasio’s views may be aligned with the way that emotion and feeling are being presented in this thesis. He makes a clear distinction between the two terms:

> I have proposed that the term *feeling* should be reserved for the private, mental experience of an emotion, while the term *emotion* should be used to designate the collection of responses, many of which are publicly observable.\(^{439}\)

Emotion is associated with responding outwardly, but appears to be within the body, yet not within conscious awareness. When emotion does enter into awareness, it is described as feeling.

All emotions use the body as their theater (internal milieu, visceral, vestibular and musculoskeletal systems), but emotions also affect the mode of operation of numerous brain circuits: the variety of the emotional responses is responsible for profound changes in both the body landscape and the brain landscape. The collection of these changes constitutes the substrate for the neural patterns which eventually become feelings of emotion.\textsuperscript{440}

Emotion relates most clearly to patterns of response, triggered unconsciously.

Emotion was probably set in evolution before the dawn of consciousness and surfaces in each of us as a result of inducers we often do not recognize consciously; on the other hand feelings perform their ultimate and longer-lasting effects in the theater of the conscious mind.\textsuperscript{441}

\[\text{See over for Table 2.1 Levels of Life Regulation}\]

\textsuperscript{440} Ibid., p 51-2.  
\textsuperscript{441} Ibid., p 37.
Thus, emotion is schematised as a level between the more basic regulatory levels and the level of feeling:

| HIGH REASON | Complex, flexible, and customized plans of response are formulated in conscious images and may be executed as behaviour. |
| CONSCIOUSNESS |
| FEELINGS | Sensory patterns signalling pain, pleasure and emotions become images. |
| EMOTIONS | Complex, stereotyped patterns of response, which include secondary emotions, primary emotions, and background emotions. |
| BASIC LIFE REGULATION | Relatively simple, stereotyped patterns of response, which include metabolic regulation, reflexes, the biological machinery behind what will become pain and pleasure, drives and motivations. |

(Table 2.1 Levels of Life Regulation)\textsuperscript{442}

Yet, this mode of schematising levels of functioning sits somewhat uneasily with the model of consciousness to which Damasio devotes most of his attention. In this model, three levels pertaining to the emergence of consciousness are described. These are based on the concept of orders of representation that support the emergence of a sense of self. The level immediately below conscious awareness is termed the proto-self.

The deep roots for the self, including the elaborate self which encompasses identity and personhood, are to be found in the ensemble of brain devices which continuously and nonconsciously maintain the body state within the narrow range and relative stability required for survival. These devices continuously represent nonconsciously, the state of the living body, along its many dimensions. I call the state of activity within the ensemble of such devices the proto-self, the nonconscious forerunner for the levels of self which appear in our

\textsuperscript{442} Ibid., p 55.
minds as the conscious protagonists of consciousness: core self and autobiographical self.  

The proto-self is conceived as the brain’s role in the processes of homeostatic regulation.

*The proto-self is a coherent collection of neural patterns which map, moment by moment, the state of the physical structure of the organism in its many dimensions.*

Furthermore,

The proto-self does not occur in one place only, and it emerges dynamically and continuously out of multifarious interacting signals that span varied orders of the nervous system. Besides, the proto-self is not an interpreter of anything. It is a reference point at each point in which it is.

There is some tension in the concept that the proto-self ‘maps’ or ‘represents’ the state of the physical body at any given instant; this is perhaps better explained as simply an emergent level of organisation, which is, in a sense, a prerequisite for any living self; a semi-autonomous system by definition functions as a somewhat separate whole.

Consciousness emerges as the level at which the functioning of the proto-self is interpreted in relation to objects, better described as occurrences outside the self. Damasio hypothesises the existence of a basic level of consciousness called core consciousness.

*Core consciousness occurs when the brain’s representation devices generate an imaged, nonverbal account of how the organism’s own state is affected by the organism’s processing of an object, and when this process enhances the image...*

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444 The term ‘homeorhesis’ as a more accurate conceptualisation of functioning than ‘homeostasis’ was discussed in Chapter Four and will not be discussed again here. Homeostasis is used here in the reporting of Damasio’s theory.
445 Ibid., p 154.
446 Ibid.
This foundational level of consciousness is described as “the very evidence, the unvarnished sense of our individual organism in the act of knowing”\textsuperscript{448}. It is largely inferred from observations of atypical states of consciousness resulting from brain injury. Damasio has observed that this very basic mode of consciousness can be present without any higher level capabilities of conscious thought or reasoning, which he describes as “the capacity to be aware of a large compass of entities and events”.\textsuperscript{449} He terms this extended consciousness, and associates it also with explicit memory, or, the ‘autobiographical self’.

**AUTOBIOGRAPHICAL SELF:** The autobiographical self is based on autobiographical memory which is constituted by implicit memories of multiple instances of individual experience of the past and of the anticipated future. The invariant aspects of an individual’s biography form the basis for autobiographical memory. Autobiographical memory grows continuously with life experience but can be partly remodelled to reflect new experiences. Sets of memories which describe identity and person can be reactivated as a neural pattern and made explicit as images whenever needed. Each reactivated memory operates as a “something-to-be-known” and generates its own pulse of core consciousness. The result is the autobiographical self of which we are conscious.

**CORE SELF:** The core self inheres in the second-order nonverbal account that occurs whenever an object modifies the proto-self. The core self can be triggered by any object. The mechanism of production of core self undergoes minimal changes across a lifetime. We are conscious of the core self.

**CONSCIOUSNESS**

**PROTO-SELF:** The proto-self is an interconnected and temporarily coherent collection of neural patterns which represent the state of the organism, moment by moment, at multiple levels of the brain. We are not conscious of the proto-self.

(\textit{Table 6.1. Kinds of Self})\textsuperscript{450}

The most interesting aspect of this mode of conceptualising consciousness, in particular the more fundamental core consciousness, is that Damasio sees

\textsuperscript{447} Ibid., p 169.
\textsuperscript{448} Ibid., p 125.
\textsuperscript{449} Ibid., p 198.
\textsuperscript{450} Ibid., p 174.
consciousness as inherently relational. The sense of self that emerges at this level appears to be a gestalt perception, in the sense that changes, imaginable only as an outer aspect, as lower level physiological changes, occurring inside the organism are perceived in relation to the external situation in the form of one whole ‘sense of self in the act of knowing’. Whether knowing is an appropriate term here is debatable, although it seems to refer to the kind of knowing that may be related to the idea of the ‘sense of fit’. Damasio does also describe core consciousness as a feeling:

In the opening chapter of this book, I suggested that core consciousness includes an inner sense based on images. I also suggested that the particular images are those of a feeling. That inner sense conveys a powerful nonverbal message regarding the relationship between the organism and the object: that there is an individual subject in the relationship, a transiently constructed entity to which the knowledge of the moment is seemingly attributed.451

Whether core consciousness may be described as one particular feeling or more broadly as somewhat differentiated inner experiences is not altogether clear in Damasio’s work. Despite placing feeling below consciousness in his hierarchical view of emotion, feeling and ‘higher reason’, he suggests that feelings belong at the threshold of the emergence of consciousness: “it is possible that feelings are poised at the very threshold that separates being from knowing and thus have a privileged connection to consciousness”.452 Furthermore, a final point he makes in one of his characterisations of core consciousness is that

Because of the body-related nature of both organism maps and second-order maps, the mental images that describe the relationship are feelings.453

If we ignore the unfortunate metaphor of ‘maps’, implying a representation that is somehow elsewhere which would, as already mentioned in relation to the concept of the proto-self, be better conceptualised as an emergent level of complexity, we can see that Damasio appears to be suggesting that feelings occur as a level of

451 Ibid., p 125.
452 Ibid., p 43.
453 Ibid., p 170.
organisation between lower levels of functioning and an external situation. This suggests that feeling is the most basic form of perception, the consciousness of a relation to an entire situation, inside and outside the organism. Yet this is at odds with his earlier suggestion that core consciousness is an immediate experience of a sense of self, effectively without any other content. This makes core consciousness appear more like a feeling of aliveness than a sense of doing something in particular. In a way, this perspective aligns quite well with the way that this thesis has discussed the emergence of consciousness; the most basic form of consciousness may indeed be an undifferentiated sense of aliveness arising as the inner aspect of the highest level of complexity of a self, observable in this complexity as outwardly directed action. Yet if core consciousness is genuinely relational, and a level that interprets an entire situation, the inner functioning of an organism in relation to external circumstances, then it must have an inner aspect, some content of its own that changes as the relation to the situation changes. If it may described as a feeling, then it may be reasonable to assume this inner aspect of less complex creatures is an undifferentiated feeling of aliveness, but that for humans core consciousness describes a range of feelings. The range would have to include all forms of inner sensing, in keeping with the way feeling was defined earlier, thus including feelings that appear more sensory, such as pain, and feelings we associate more with the action of emotion, such as happiness.

The concept of feeling as an interpretive level between emotion and the more differentiated extended consciousness is in fact made more clearly by Damasio in an earlier work, *Descartes' Error: Emotion, Reason and the Human Brain*.

That process of continuous monitoring, that experience of what your body is doing *while* thoughts about specific contents roll by, is the essence of what I call a feeling. If an emotion is a collection of changes in body state connected to particular mental images that have activated a specific brain system, *the essence of feeling an emotion is the experience of such changes in juxtaposition to the mental images.*

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454 Ibid., p 145.
Damasio maintains that core consciousness is not involved with explicit memory, which is perhaps partly why he attempts to describe it as a completely immediate phenomenon, created instantaneously, over and over, without any inner differentiation.

In terms of memory, all that core consciousness requires is a very brief, short-term memory. We do not require access to vast stores of past personal memories to have core consciousness, although such vast autobiographical reservoirs contribute to the advanced levels of consciousness I designate as extended.⁴⁵⁵

Even though Damasio mentions implicit memory in his schematising of the levels of self, he does not appear to place the functioning of implicit memory as clearly within a particular level. According to the previous discussion of action, implicit memory should be seen as a level below conscious awareness related to complex outward action. If consciousness emerges as the highest inner level of complexity then, whilst it provides for rather than requires the extended consciousness and explicit memories of the autobiographical self, its own possibility is completely reliant on the forms of repetition in the levels that constitute it. This includes all forms of repetition that sustain the whole organism at various levels. Implicit memory and appraisal is one way of conceptualising the forms of repetition at the level immediately below consciousness and these forms of repetition are observable in our actions.

If we define core consciousness as feeling, then it may be seen as both immediate in the way Damasio assumes and constituted from past experience. Thus, consciousness as the inner aspect of the self is a gestalt experience that contains within it, conceptually at least, the double relation; the entire history of the self and the sense of the self as a present relation to external circumstances. Indeed, Damasio is well aware of this point in his earlier work.

⁴⁵⁵ Ibid., p 113.
feeling your emotional states, which is to say, being conscious of emotions, offers you flexibility of response based on the particular history of your interactions with the environment.456

The proto-self, or the highest inner level of the self below conscious awareness is also relational; the modes of interacting with the environment that arise from it are a continual process of adjustment in relation, essentially adjusting levels of functioning below awareness. Thus, emotion, as outwardly directed action, should really be seen as an observable relation of this level of complexity; the adjustments are an emergent level inside the self, yet outside awareness. Thus, the adjustments at this level are constitutive of consciousness. This perspective can clarify some of Damasio’s difficulties:

Emotions and core consciousness tend to go together, in the literal sense, by being present together or absent together.

The lack of emotion is surprising given that, as we have seen, emotions can be triggered nonconsciously, from unattended thoughts or unknown dispositions, as well as from unperceivable aspects of our body states. The lack of emotion when core consciousness vanishes may be parsimoniously explained by suggesting that both emotions and core consciousness require, in part, the same neural substrates, and that strategically placed dysfunction compromises both kinds of processing. The shared substrates include the ensemble of neural structures which support the proto-self...the structures which both regulate and represent the body’s internal states. I take the lack of emotion, from background emotion on up to higher levels of emotion, as a sign that important mechanisms of body regulation have been compromised. Core consciousness is functionally close to the disrupted mechanisms, interwoven with them, and thus compromised along with them. There is no such close functional relationship between emotional processing and extended consciousness.457

457 Ibid., p 100-01
Damasio’s view should therefore be modified to clarify the relationships between the two models he creates, the levels of life regulation and the levels of self. The only way to consistently do this is to clearly associate the level of the extended consciousness with the autobiographical self and explicit memory and appraisal, the level of feeling with the core self and the level below this, the proto-self, with implicit memory and appraisal observable in the outwardly directed action of emotion. The most important aspects of these levels for this thesis are that feeling describes the sense of self in relation, and that action describes the self in relation prior to the emergence of consciousness as a sense of self, but may be linked with some basic inner awareness.

This three levels approach to the emergence of consciousness can help to clarify some points in the work of Martha Nussbaum, which has much to offer in the conception of the relationship between feeling and emotion, or more properly, our most basic inner experiences and the actions the underlie them.

In her book, *Upheavals of Thought: The Intelligence of Emotions*, Nussbaum presents her view as neo-Stoic, elaborating upon and extending the Stoic view. She refines the Stoic view by considering points not covered by the Stoics, such as the role of imagination in emotions and whether “there are elements other than cognitive attitudes that are involved in emotion”. Nussbaum is comfortable with the label, neo-Stoic, yet differentiates her view from the Stoic in three main areas: “the commonality between humans and other animals, the role of social norms, and the complexities of an individual human history”. These are all emphases that are relevant to the discussion thus far.

Nussbaum retains the Stoic conception of *eudaimonia*, or flourishing as central to emotion. Indeed, Oatley, Keltner and Jenkins refer to the work of Nussbaum when they mention that “Most researchers now assume that emotions follow appraisals of an event”.

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458 Ibid., p 4-5.
459 Ibid., p 4.
This view holds that emotions are appraisals or value judgments, which ascribe to things and persons outside the person’s own control great importance for that person’s own flourishing. It thus contains three salient ideas: the idea of cognitive appraisal or evaluation; the idea of one’s own flourishing or one’s important goals and projects; and the idea of the salience of external objects as elements in one’s own scheme of goals. Emotions typically combine these ideas with information about events in the world; they are our ways of registering how things are with respect to the external (i.e. uncontrolled) items that we view as salient for our well-being.461

Nussbaum explains the use of ‘external’ in the preceding passage in a footnote that reads, “Externality is a metaphorical way of referring to the fact that these elements are not securely controlled by the person’s own will; in that sense many things inside the person’s own body (health and disease, for example) are “external”.”462 This reminds of Langer’s concept of the situation.

‘Will’ implies being consciously able to have an effect. Thus, emotion arises through some kind of understanding about ways we may or may not have an effect, and therefore may or may not be affected by the world outside our consciousness, even that part of the world that is ‘inside’ us. Furthermore, Nussbaum makes clear that emotions relate to beliefs rather than facts: “emotions, like other beliefs, can be true or false, and (an independent point) justified or unjustified, reasonable or unreasonable. The fact of having an emotion depends on what the person’s beliefs are, not on whether they are true or false.”463 Thus, if we read emotion in the context of the previous discussion, we might say that the actions emerging from the functioning of implicit memory are our beliefs about how we affect and are affected by the world. That they may be true or false, appropriate or inappropriate makes sense in terms of the way that implicit memories can become stronger over time, enlarging the contexts that occasion them.

462 Ibid.
463 Ibid., p 46.
Whilst the Stoic notion of emotions as beliefs asserts that beliefs are linguistically formulable propositions, Nussbaum modifies this view, extending the concept of belief beyond the linguistic, but allowing her to maintain as central the Stoic view of judgment as assent to an appearance. Thus, rather than an essentially voluntary act of assent, as the Stoics would describe emotion, Nussbaum can bring in “habit, attachment, and the sheer weight of events [that] frequently extract assent from us”, and can attribute emotion to children and animals, which the Stoics did not. Judgment, therefore, is any kind of assent to appearance rather than being limited to linguistically formulable propositions; “Whenever [children and nonhuman animals] accept a way the world seems as the way it is, they can be said to have judgment in my sense.”

For a judgment to be involved with emotion, it must be evaluative and eudaimonistic, and Nussbaum finds judgment in this sense to be a necessary and sufficient constituent of emotion. She admits that this may appear counterintuitive, “to make the emotion itself a function of the cognitive faculties (of thought, in its most general sense) rather than a nonrational movement produced in some way by cognition”, and that this view would appear to deny the kinetic and affective aspect of emotion that gives us the sense of its importance, or urges us to act. Interestingly, with regard to this point, she emphasises that judging is dynamic rather than static. Furthermore, even though propositions about the world become part of our cognitive makeup, and then may not appear to involve active assent, Nussbaum maintains that continuous assent or acceptance occurs whenever a belief is invoked in some way.

Most of her explanation of emotion is entirely consistent with the way it has already been described. The concept of judgment as an assent to an appearance, that is somehow rational, dynamic and often ‘extracted from us’ by external events can clearly describe that much, if not most, of our behaviour, displays an acceptance, not only of the world, but our own place in it, simply because we act. Furthermore, action is inherently evaluative and eudaimonistic, even in much less complex organisms. Recall Langer’s statement that an organism always does everything it can. If

464 Ibid., p 38.
466 Ibid., p 44.
judgment in this sense may be attributed to children and non-human animals and it is a kind of cognition, then surely it is a cognition we infer because we observe behaviour, and we do not know and indeed need not assume anything about consciousness.

Nussbaum is reluctant to place too much emphasis on unconscious emotion. Her view is characterised as a cognitive / evaluative view, and requires accessibility to conscious awareness in the majority of cases: the cognitive elements are an “essential part of the emotion’s identity”.467 This does not seem entirely consistent with the view of judgment as assent to an appearance. At the same time, though, her wish to define emotion as somehow accessible to consciousness is reasonable. It is difficult to speak about the relationship between emotion as outwardly directed action and consciousness if we maintain an absolute distinction between the conscious and unconscious. Acting unconsciously, in the sense of acting as emerging from implicit memories, does not mean that we do not know that we are acting at all, but rather that we do not have an immediate inner experience of the pattern, tendency or disposition, at the level below consciousness we are engaging. These ‘unconscious aspects’ of our action may be interpreted in relation to the current situation, a new level of complexity, the inner aspect of which is feeling. Yet even if this does not occur, if we are not aware of feeling, emotion as evaluative and eudaimonistic action may still be considered accessible to consciousness because we can observe our own actions in relation if we choose to. This will be further discussed in relation to extended consciousness. For the moment though it is worth pointing out that conceptualising emotion as the outer and therefore relational and observable aspect of an inner cognition that is not conscious brings greater clarity to Nussbaum’s ideas.

Further support for the way that emotion and feeling have been characterised thus far can be found in Nussbaum’s approach to feeling. She tends to approach feeling in a way that is commensurate with the way it has been characterised in this discussion and that is amenable to the concept of inner aspect. Feeling is an aspect of emotion, but it does not define emotion and need not be present for emotion to occur.

467 Ibid., p 34.
For even if we concede that emotion’s seat must be capable of many cognitive operations, there also seems to be a kinetic and affective aspect to emotion that does not look like a judgment or any part of a judgment. These are rapid movements, feelings of pain and tumult.468

In considering the relationship between emotion and feeling, Nussbaum evokes her own experience of grief.

When I grieve, I do not first of all coolly embrace the proposition, “My wonderful mother is dead,” and then set about grieving. No, the real, full recognition of that terrible event (as many times as I recognize it) is the upheaval. It is as I described it: like putting a nail into your stomach. The appearance that she is dead sits there…asking me what I am going to do with it. Perhaps, if I am still uncertain, the image of her restored to health sits there also. If I go up to embrace the death image, if I take it into myself as the way things are, it is at that very moment, in that cognitive act itself, that I am putting the world’s nail into my own insides. That is not preparation for upheaval, that is upheaval itself. That very act of assent is itself a tearing of my self-sufficient condition.469

Thus, grief is in a sense the recognition that someone is dead, someone in whom the person who grieves places great value. This fulfils the requirement of an evaluative judgment, and is in this sense a cognitive act. Nussbaum seems clear that the ‘upheaval’, which is essentially the feeling that is “like putting a nail into your stomach”, and the cognitive act that defines the emotion co-occur. This cognitive act does not appear to be describable in linguistic terms; evidently it is a change that is internal to a person. Indeed, she appears to be saying that the upheaval or feeling is the cognitive act. Yet, as feeling does not define emotion, it would not be accurate to describe feeling as the type of cognition involved with emotion.

We should grant, I think, that in typical cases emotions are conscious experiences, as with beliefs generally, the nonconscious are atypical cases, and

468 Ibid.
469 Ibid., p 45.
parasitic on the conscious cases. So it feels like something to have an emotion...The upheaval is a part of the experience of what it is like to have those thoughts – at least much of the time.\(^{470}\)

Yet, potentially, such ‘thoughts’ are often not conscious, and Nussbaum in fact creates room in her theory for many kinds of nonconscious judgment. She distinguishes between background and situational emotions, as “the distinction between evaluative judgments that persist through situations of numerous kinds, and judgments that arise in the context of some particular situation.”\(^{471}\) She likens this distinction to Richard Wollheim’s distinction between states and dispositions,\(^ {472}\) but claims that her own distinction is not equal to an absolute distinction between conscious and nonconscious.

One may, I believe, have a situational emotion of which one is not aware: as when someone has grief at a particular death without being aware of it (or not yet), or when one is angry at someone for some specific reason without being aware of it. (This nonconscious operation of a situational emotion is analogous to the nonconscious operation of a whole host of concrete beliefs in one’s ordinary movements. Thus, when I move across my office, I have and use various situation-focused beliefs about the locations of objects, of which I have conscious awareness.) On the other hand, background emotions are not always nonconscious. A persisting love or joy may have a distinct phenomenology, without transforming itself into a situational emotion.\(^ {473}\)

Nussbaum’s description of the ‘consciousness’ of emotion here is the ‘distinct phenomenology’, a feeling. Thus it would seem that in the atypical case of background emotion as conscious mentioned here, we essentially know we are having it because we have a feeling. Yet even in this case we might still maintain that the cognition by which she defines emotion is not conscious. This is difficult to imagine without the levels view, which makes feeling a higher level interpretation of the unconscious cognition that we can observe in our modes of acting in the world, based

\(^{470}\) Ibid., p 62
\(^{471}\) Ibid., p 69.
\(^{472}\) Ibid.
\(^{473}\) Ibid., footnote 69, p 69-70.
on prior experience yet interpreted in relation to the current situation. In this sense, the
distinction between background and situational perhaps does not hold, as we are
always in situations.

I am thinking of nonconscious in a much more ordinary sense, just as the sense
in which many of our most common beliefs are nonconscious, although they
guide our actions in many ways... We are repositories of an indefinite number of
such beliefs and we rely on them in our actions.474

Nussbaum’s approach seems genuinely amenable to the present discussion. These two
passages remind of Johnson’s view of physical actions, Polanyi’s concept of tacit
knowing and indeed can be viewed as commensurate in many respects with the
concept of habitus. Perhaps the difference between her view and the one being
expressed in this thesis is the weighting given to the ‘nonconscious beliefs’, by which
we negotiate so much of our everyday lives, our tendencies to adjust our behaviour in
relation to myriad situations, arising both within and outside of ourselves, essentially
to maintain numerous levels of our inner functioning within acceptable ranges of
tension and ease. This thesis contends that a far greater proportion of our behaviour is
relatable to beliefs of which we are not conscious than we realise.

Of course, the quandary remains as to whether emotion can be related to all types of
action. In the sense that emotion was described at the beginning of this chapter, as a
‘moving out’, it would appear that all action fits this definition to some degree. In this
regard, the ambiguity inherent in the continued use of the term emotion becomes
evident. It could be better to describe all action as a ‘moving out’, in the sense of
adjustment of essentially internal pressures, and avoid the term emotion altogether. At
the same time, emotion, described as evaluative and eudaimonistic, actually
emphasises that all action is inherently purposeful. But there is little doubt that some
of the adjustments that we make by acting mean more to us than others, and it is likely
that these give rise to the stronger feeling experiences with which the general usage of
the term emotion, or ‘emotional experience’ is associated. It is therefore worth
persisting a little more with the idea that, whilst all action is essentially a ‘moving

474 Ibid., p 71-2
out’, some types of action are simply more important to us than others: there is a
greater internal pressure towards their consummation than others.
Nussbaum’s distinction between emotions, appetites and moods offers some
assistance in this direction, and it will be shown that Damasio’s construction of
consciousness around the concept of sense of self is also helpful.

Nussbaum begins by following Plato in the distinction between appetites and
emotions, with appetites categorised as ‘object-fixated’ and ‘value-indifferent’, as
opposed to emotions which are ‘object-flexible’ and ‘value-suffused’.475 However, the
most interesting point that she makes about the distinction between the two is to
describe appetite as a pull and emotion as a push.

A bodily appetite such as hunger is a push: that is, it arises relatively
independently of the world, as a result of the animal’s own bodily condition, and
it is this condition that causes the appetite to represent an object that it
seeks…Emotions, on the other hand, are pulled into being by their object, and
by the seeming importance of the object. In that sense intentionality is at their
very core.476

Yet this distinction is not always entirely clear cut, for instance, in the case of sexual
desire, which has elements of both; it may be seen as generated within the body, but
also emerging in relation to an object. The distinction between emotions and moods is
even less easily discernible. The characteristic difference described by Nussbaum is
that emotions “always have an object, even if it is a vague object”,477 whilst moods do
not.

The concept of appetite, then, can be seen to describe the fluctuation of internal
rhythms that inherently involve phases of tension, which then require some kind of
higher level action by the organism, such as finding food and eating. Appetites may
be thought of as relating to basic requirements for the survival of the semi-
autonomous system. Yet appetites must also be considered situational. Furthermore,

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475 Ibid., p 130
476 Ibid., p 130-1.
477 Ibid., p 133.
given the association between implicit appraisal and situations, the distinction between emotions and moods may be simply that moods are more continuous and general responses to situations.

The concept of emotion as ‘pulled into being by an object’ may be seen to describe emotion in relation to the external situation, yet two points are worth making with regard to this definition. Given that implicit memory is possibly a memory of an entire context, it may be more accurate to describe emotion as ‘pulled into being’ by an external situation. Yet this does not account for the relation to individual history that is integral to any response to a situation, even though Nussbaum suggests it in the ‘seeming importance’ of the object; there is always something potentially illusory about emotion, and this is directly relatable to the formation of implicit memories. It is more accurate to say that emotions, or actions to adjust in relation to strong internal pressures, are repetitive and therefore historically-based processes that occur in relation to situations. The feelings that arise that give us a sense of the importance of such internal pressures are the interpretation of these historical process in relation to the current situation. Together they form a gestalt impression that is the most basic form of consciousness. Interpreting action and feeling in this way results in the strong claim that feeling is our sense of self including the entire ontogenetic trajectory up until a given situation at a particular point in time. Therefore, feeling actually provides much information about the past and in many cases, if not most, very little information about the present.

It is important at this stage to clarify the status of action in relation to consciousness. The concept of action has thus far been interpreted largely in relation to Langer’s concept of the act, particularly instinctual acts as gestalts. The concept of instinctual acts as gestalts related to situations might cause us to overlook the ways that animals adjust as the situation changes. Thus, a migratory bird might slightly adjust its direction at times, whilst still responding to the inner need to carry out the whole act of migration. This can be imagined with reference to Langer’s speculation about the perceptions involved with such acts involving a feeling of familiarity, rather than distinctly focusing on objects in the environment as guides; the whole environment in relation to the animal is the guide. Two possibilities exist with regard to this speculation: either the bird only experiences the inner aspect of itself as the process of
migration as a feeling of familiarity undifferentiated from anything else, or, perhaps more likely, that the bird experiences some differentiation and movement between feelings of familiarity and unfamiliarity. This allows for the possibility of adjustment in relation, even without the perception of objects. Feeling is a whole perception of the self in relation at a given instant, and can be assumed to be enough to occasion some choice.

Yet examples of animal acts that do not adjust also exist. In such acts the entire process really is more properly internal to the organism. We can of course speculate that the carrying out of complex acts, even those that are carried out in the same way across individuals, every time, is of a high enough level of complexity that some inner awareness occurs, but if it does, it is best described as an awareness of the highest level of inner functioning: the act itself is not relational even if it is triggered by a situation. Yet the self as a semi-autonomous system has been assumed to begin at the level of an individual cell, and the possibility has been put forward that even some inner aspect is possible at this level. Thus, it is worth making a distinction between an inner aspect as awareness of inner functioning and an inner aspect more like consciousness. This consciousness would be based on feeling, and could be described as a sense of self as distinct from a simpler inner awareness. The sense of self is relational, and its relational status means that there must be some inner differentiation as situations change.

It may be assumed that the most basic inner differentiation of feeling is similar to Langer’s familiarity, but given the previous discussion in relation to Bourdieu and Chapple, it is termed the sense of fit; giving the self an inner sense of the degree to which its actions harmonise the lower levels of the self and the external situation. The most basic differentiation that might be made in the inner aspect of the self, then, would be whether to proceed along the same lines or make an adjustment. The quality of such a sense or feeling is possibly quite different in different animals, yet may be summarised as an openness to continue, or a closedness, to alter. In the following chapter the feelings associated with the most fundamental inner aspect of the self in relation will be described as joy and fear.
Feeling should be seen as a gestalt sense of self; it does not require reflection upon the fact that one is a self. In this regard, feeling may be understood as a basic perception of separation. As a gestalt, it involves simply a sense of differentiation; perhaps feeling is inherently an understanding that differentiation occurs, even if only between experiences of familiarity and unfamiliarity, or fit and lack of fit; feeling is both an experience and an understanding.

Of course, this is very difficult to imagine, as during the process of the development of our human consciousness, a higher level of complexity develops, previously referred to as extended consciousness, which supports the possibility of reflecting on ourselves, essentially knowing that we are having a feeling. This in turn develops a highly differentiated view of the self, the autobiographical self. This level and its relation to the levels that constitute it requires clarification.

**Extended Consciousness**

The intention of this thesis is to theorise feeling as a perception of the self in relation, made possible by the ways of being in and interacting with the world that are not conscious. Thus, a detailed explanation of the intricacies of extended consciousness in terms of the emergence of thought, reasoning, imagination and explicit memories will not be attempted here. Rather, extended consciousness will be described in terms of its role as the highest level of complexity of the inner of the self, and the effect of this level as the mediator of the sense of self present in feeling and the perception of situations in the external environment.

Extended consciousness may be seen as a higher level of description than feeling, in the sense that it allows for the perception and understanding of a much vaster array of types than the descriptive level of feeling. As a redescription of the inner of the self acting in the world, extended consciousness engages explicit memory and explicit language and allows for conscious reflection on objects and situations and their relation to the self. This provides the possibility for choice, both in terms of choice of perspective and choice of action to take in the world. This claim is supported by LeDoux’ explanation of explicit appraisals that can override the behaviour through
which implicit memories relate to the world. Thus, our interactions with the world may be adjusted according to the finer differentiations of extended consciousness.

This all fits very well with hierarchy theory and the emergence of greater levels of complexity. Our modes of interacting with the world that do not engage conscious perceptions are not more or less correct than those that are based on conscious perception; they are simply more general modes of understanding the relation to situations. Thus, theoretically, we might find ourselves acting in a particular way, attempting to adjust our inner functioning by our outwardly directed actions, based on a contextual memory that is entirely inappropriate to the present external situation. We then have the ability to perceive the inappropriateness of our behaviour, a higher level interpretation of lack of fit, and choose to alter our actions. Yet, this process of adjusting in relation is not so straightforward, given the strength of implicit memory. Extended consciousness, as the inner of the highest level of complexity of the self, must maintain the self as semi-autonomous system in the world, within acceptable limits. Furthermore, as such a system, the self collects most of the effects of its own functioning. This reminds of the paradox of individuation: finer differentiations in our perceptions of the world are made possible by being more separate from the world, and this greater separation is supported by a detailed individual history. Extended consciousness, as an inner aspect of the self as semi-autonomous system, then, is weighted towards maintenance of the self, and the finer differentiations made possible by this level of consciousness provides choice between different descriptions of situations. Extended consciousness must find a description that fits the perceived external situation well enough to maintain lower levels of functioning with acceptable ranges; it cannot directly affect the implicit appraisals from which action emerges. Furthermore, the level that constitutes and therefore provides the very possibility for extended consciousness is the most basic sense of self as feeling; the descriptions of extended consciousness interpret the already existing sense of self in relation, and although a different description at this higher level provides a different context for the emergence of feeling, feeling remains an interpretation of its constituents of implicit appraisal in relation. This greatly reduces the range of appropriate descriptions that will fit the self in the world at both conscious levels.
Chapter Eight
The Development of Feeling

Feeling has thus far been discussed largely in terms of its emergence as the most basic and entirely relational sense of self. Thus, feeling has been treated quite generally in terms of the principles by which it emerges in relation to situations, levels internal and external to the self. The differentiation of types of human feeling and their development in relation will be discussed in this chapter. This continues the discussion of the previous chapter with regard to modes of understanding emotion and feeling, specifically in relation to development and drawing primarily on the work of Nussbaum.

Nussbaum is clear about the importance of development, particularly early infant development, to the emotional experiences that follow. Her references to the importance of past experiences conveys the concept of repetition in the present

For new objects of love and anger and fear bear the traces of earlier objects; one’s emotions toward them are frequently also, in both intensity and configuration, emotions towards one’s past.  

Thus, she states her overall perspective on the role of development:

I shall argue…that in a deep sense all human emotions are in part about the past, and bear the traces of a history that is at once commonly human, socially constructed, and idiosyncratic.

Nussbaum’s view may be clearly interpreted in the context of this thesis. A range of experiences are possible for us, simply by virtue of being a process observable in the human form, along with the positioning of an individual within a given culture at a given time. Thus, the broad positioning we take as human beings, along with the more specific positioning of being born in a particular place and time, within a particular group, sets limits for individuation, from birth and through the entire life cycle. Yet

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479 Ibid., p 177.
given that the emergence of consciousness, a sense of self as feeling, occurs initially, at least, and most strongly through the formation of implicit memories as gestalt perceptions of the relation between the self and a myriad of highly specific and detailed situations, our modes of responding to situations and the self that develops is indeed highly idiosyncratic; it is utterly unique for every person. Before a discussion of Nussbaum’s view of emotional development, or, in the terminology of this thesis, the development of the inner aspect of the self as feeling, it is worth making the point that even though the inner of the self as feeling is a quite general, gestalt and often ‘inchoate’ experience, as consciousness emerges and differentiates, the contextual nature of implicit memory means that this inner experience emerges in relation to details of situations. Each situation is also utterly unique, as is, indeed, each moment. The feeling that occurs in relation is essentially an understanding of type, and whilst it is general, the positioning in relation that is integral to its arising, is specific.

As is commensurate with the concept of semi-autonomous systems, development is heavily dependent on early stages, as boundaries are forming between the self and the world, that eventually become established such that much of the functioning of the self refers inwards.

I shall argue, then, that adult human emotions cannot be understood without understanding their history in infancy and childhood.480

This line of thinking is a traditional concern of developmental psychology and psychoanalysis, but Nussbaum mentions that the development of emotion has been little treated in philosophy. Therefore, Nussbaum draws on modern psychoanalysis to elaborate upon the cognitive / evaluative account of emotion she has already outlined. However, she begins her discussion from the insights of Lucretius into human infant development, so as to differentiate her line of inquiry from traditional psychoanalysis. Lucretius’ account describes “the infant’s central perception of itself…as an entity very weak and very powerless toward things of the greatest importance.”481 Nussbaum identifies “three distinct facets of the infant’s development”482 in

480 Ibid., p 178.
481 Ibid., p 182.
482 Ibid., p 183.
Lucretius’ account. First, and most obviously, are bodily needs; “the need for every life-sustaining help”.\(^{483}\) This facet of infant development involves an inner experience of the infant. Nussbaum says that

If we focus on the infant’s evolving perceptions, we will see this need as both Lucretius and the modern psychologists present it – as a felt need for the removal of painful or invasive stimuli, and for the restoration of a blissful or undisturbed condition.\(^{484}\)

Objects that are perceived as ‘restorative agencies’ take on central importance in the infant’s world; initially though,

Whether it is the mother, father, nurse, or some other caretaker or caretakers who plays or play the primary role here, this restorative agency will at first be experienced by the infant not so much as a distinct object, but as a process of transformation through which the infant’s own state of being is altered.\(^{485}\)

Even at this stage of her narrative of infant development, Nussbaum’s account involves a distinction between inner and outer aspects; she is clearly attempting to imagine the development of feeling as an inner experience in relation to situations. Situations include the rhythms and phases of lower levels, resulting in, say ‘hunger’ or ‘thirst’, that will at times require higher level action to adjust, such as feeding. Yet the infant has no higher level understanding of such changes; we might reasonably imagine infant consciousness as pure feeling, a transformational process that the infant is in some way completely within. This feeling experience and the tumultuous changes it involves, Nussbaum describes with reference to the myth of the Golden Age, in which everything is automatically given, all needs automatically satisfied:

Thus, although at times the infant’s world is a Golden Age world, these times alternate with times when the world is hungry, distressed, and in discomfort. The Earth does not give everything automatically, and the infant’s world of

\(^{483}\) Ibid.
\(^{484}\) Ibid.
\(^{485}\) Ibid., p 184.
sudden transformations is felt from the start as chancy, porous, full of uncertainty and danger.\textsuperscript{486}

This experience gives rise to the second facet of infant neediness, “a need for comfort and reassurance that is not reducible to its basic bodily needs.” This second point appears to be an extrapolation by Nussbaum from the work of Lucretius; she finds this in his “account of the nurse, who both feeds the child and calms it with soothing words and caresses.”\textsuperscript{487}

Nussbaum differentiates her work from “early psychoanalytic accounts of infancy [that] reduced all needs to needs for bodily gratification”\textsuperscript{488} on the basis of this second aspect of infant need; particularly important, then, is the irreducibility of this need for comfort and reassurance to basic bodily needs.

Ultimately, we cannot know the inner experience of the infant, although it is reasonable to identify comfort and reassurance as a distinct need; Nussbaum cites some evidence that monkeys will seek comfort even if their physical needs are satisfied, and as soon as these basic needs are satisfied, they choose the source of comfort over the source of food.\textsuperscript{489} That this need for comfort is not a basic physical need is an important point. Even if, say, physical touch is considered a basic need, or the need for comfort is largely satisfied by the experience of being held and touched, the need for comfort describes more than this.

The most basic physical requirements must be met for the infant to survive at all. We might see them as related to the development of the self as a material system. However, the need for comfort and reassurance is relevant to the development of consciousness as the inner of the self as a whole. It arises in relation to the developing infant’s differentiation of feeling, the most basic sense of self. However, as infants have no higher level perception of boundaries, their experience of themselves is also the experience of the world. The way these feelings are mediated by external sources of comfort and reassurance supports not only the development of boundaries but also

\textsuperscript{486} Ibid., p 185.
\textsuperscript{487} Ibid.
\textsuperscript{488} Ibid.
\textsuperscript{489} Ibid., p 186.
gestalt perceptions of the relation between the self and the world that inherently involve beliefs about causes. We might imagine that very early feeling experiences are simply of change happening, tensions that alternate between ease and distress. Perhaps the implicit beliefs formed at a very early stage are simply based on repetitive experiences of ‘when this occurs, then this occurs’, related to the duration of certain feelings and levels of distress; the timing of changes. They may be seen as essentially experiences that, because they repeat in particular ways, entail, as gestalts, a sense of ‘how the whole world, including the self’ is, and what will happen. The alternating tension and lack of tension can be described as fear and joy.

The earliest emotions are likely to be fear and anxiety, when the transformation is temporarily withheld, joy when it is present, and increasingly, as time goes on, a kind of hope for its blissful arrival.490

Interpreting Nussbaum’s discussion in the context of this thesis allows for a clear sense that all consciousness grows from the elaboration of the experience of differentiation, which is at heart a causal perception. Even though, the elaborations that give rise to the rich inner experience of any individual human being are genuinely and inherently valuable, novel and unique, there is also a level of generality to the human experience all of which can be described in terms of joy and fear, relatable to these very early perceptions of change that are the first sense of self. Such perceptions may be termed beliefs about the self and the world because they are based on particular circumstances with particular caregivers, which could have been different.

Interestingly, some psychological studies designed to elicit unconscious emotional responses offer support for the concept of a basic differentiation between joy and fear.491 Such studies suggest “a primary appraisal process that is automatic, fast, and primitive in the sense that it gives rise to an immediate feeling of good or bad, positivity or negativity.”492 Oatley, Keltner and Jenkins summarise the point; “At the broadest or superordinate level of emotion knowledge is a basic distinction between

490 Ibid., p 190.
positive and negative, or good and bad. This seems to fit well with how people appraise the goodness and badness of stimuli immediately and automatically.\textsuperscript{493}

The basic distinction in appraisal relates more specifically to feelings of joy and fear, when understood in terms of positioning. Joy is an openness to a situation, whilst fear is a closedness, in the sense that fear is a seeking to alleviate tension through change in external circumstances. Indeed, a cross-cultural study of emotion by Harold Walbott and Klaus Scherer found that people use very similar classifications of relations to situations; joy was associated with ‘moving towards’ anger with ‘moving against’ and all other negative emotions with ‘withdrawal’.\textsuperscript{494} This supports the notion of basic positioning, related to action, as fundamental to emotion, indeed inseparable from its definition even in the simplest forms of positive and negative appraisals.

Indeed, the view that our most fundamental feelings, those from which the entire development of consciousness emerges, are joy and fear and that they emerge from impulses below consciousness to move toward or move away from, makes sense as a causal perception in relation to positioning. Joy may be related to an acceptance of an entire situation, a relation to situations that does not seek change, whereas fear may be related to a non-acceptance and a seeking of change. The distress that infants express when their world is this feeling is compounded by their helplessness. Thus, if an implicit memory, even at an early age is interpreted as the sense of self, as feeling, and it involves an impulse to action ‘away from’, yet the infant at this stage has no sense of being able to move away from the occasioning of such an experience, then fear, at this stage inherently involves lack of control. Even the very early sense of self as a relation to the world therefore involves causal perceptions about how we may or may not have an effect. As a gestalt, they are both an experience and an understanding.

But in our world emotions are needed to provide the developing child with a map of the world. The child’s emotions are recognitions of where important

\textsuperscript{493} Ibid., p 182.
good and bad things are to be found – and also of the externality of these good and bad things, therefore also of the boundaries of its own secure control. Fear and joy and love and even anger demarcate the world, and at the same time map the self in the world.495

At this point, it is important to distinguish between emotion as action, and feeling, with regard to Nussbaum’s view. Both action that is not conscious, and that seeks to adjust, and feeling as the inner of the relation between the level from which this action emerges and external circumstances, are present at birth. Thus, we have imagined the inner experience of the infant as feelings that come into being and pass away or change without any conscious knowledge as to why or how, but we must also account for the expression of the need to adjust in action. Action, at a very early age, is more simply expression through the body, such as crying and screaming, and such action appears to be innate for humans. Action serves to adjust the environment; it has an actual causal effect. It can be assumed that very early in life, the inner of the self as feeling is closely coupled to such expressions in action, but also that elaboration may begin from birth, as the infant interacts, albeit not consciously, with the environment and experiences repetition. The mode by which action adjusts the situation depends largely on the actions of others, even though the action itself also serves to release tension; even crying that is not responded to will eventually abate. A key aspect of the mediation of the situation is timing; Oatley, Keltner and Jennings discuss this in terms of mother-baby interaction, and explain that the ‘keeping-in-time’ that occurs as mothers adjust to their babies’ expressions is termed attunement.496 This reminds of Chapple’s view of the rhythms of interaction, and supports the notion that the rhythms of action and interaction, and how well they support the fluctuation of synchrony and asynchrony is fundamental to the interpretations of such fluctuations in the present; they are the basis for the sense of self.

It is interesting to reflect upon Nussbaum’s view that feelings map the world as well as the self. For even while the developing infant comes to learn many ways of interacting, both physically and through the actions of emotion, the only information that is available to him is feeling, and feeling is not a direct experience of the present,

495 Ibid., p 206-7.
496 Keith Oatley, Dacher Keltner & Jennifer M. Jenkins, Understanding Emotions, p 208.
but rather, essentially, the interpretation of what has already happened in relation to 
what is currently happening.

Only the concept of self as semi-autonomous system really captures the increasing 
differentiation from the world that means that whilst initially the action sequences 
between the infant and the external environment form perhaps a single level of 
dynamic interaction, over time these actions are mediated by the creation of implicit 
memories and, eventually, the perceptions of extended consciousness. Yet the 
strength of early patterning and repetition of action as a way to adjust, along with the 
fact that extended consciousness seeks to fit such action to external circumstances in a 
manner that sustains the self, means that patterned action continues in many contexts, 
even after higher level possibilities for choices amongst actions have become 
possible.

As mentioned, the implicit memories of acting in whole situations are beliefs about 
how we may have an effect in the world. The whole process of acting in the world, 
then, emerges through interpretation as the higher level of feeling. At one level of 
explanation, acting is a mode of indirectly adjusting feeling. As the sense of self 
develops and boundaries are instantiated between the self and the world, actions and 
the feelings that arise in the present as the inner of the self acting, may be seen to set 
up the ambivalence crisis. The ambivalence crisis describes the development of 
feeling consciousness such that love and anger come to be directed at the same object. 
This crisis has its beginnings in the gradual awareness of feeling states and the 
beginnings of causal perceptions.

If gratitude is present in a rudimentary form, in the thought that others aid it in 
its efforts to live, then, by the same token, anger should be present in a 
rudimentary form, in the thought that others sometimes fail it in its efforts to 
live…The infant does not yet understand, however, that love and anger are 
directed toward the same source. Indeed, its uncertainty about the boundaries of 
the self and other may make it unclear about whether the source of frustration is 
in or outside of itself. It may develop a vague sense that there are bad and good
agencies that are somehow parts of its own self, and it may confusedly direct anger against these parts as well as outward, or fail to make this distinction.\(^{497}\)

As differences in the world become more distinct to the developing infant, so too does positioning in relation, the inner of which is these feelings.

The child’s evolving recognition that the caretaker sometimes fails to bring it what it wants gives rise to an anger that is closely linked to its emerging love. Indeed, the very recognition that both good things and their absence have an external source guarantees the presence of both of these emotions – although the infant has not yet recognized that both take a single person as their object.\(^{498}\)

The infant therefore wavers between the positioning of omnipotence, “in which the entire world revolves around its wants”,\(^ {499}\) and helplessness, the realisation not only that the world does not exist entirely to satisfy its needs but also that the satisfaction of needs is entirely outside its own control.

All infant omnipotence is coupled with helplessness. When an infant realizes that it is dependent on others, we can therefore expect a primitive and rudimentary emotion of shame to ensue.\(^ {500}\)

Reflecting on Nussbaum’s theory, then, we might say that love emerges from joy and gratitude, as the borders between the self and the world begin to take shape. The relationship between fear or anxiety, and anger may be a little more complex; fear may be described as the feeling of separation that occurs in the noticing of change, with anger emerging when there is some directedness to the realisation that there are agents of change that may not always be present. Shame, it seems, occurs when there is enough distinctness of self for some kind of comprehension of helplessness. All these early feeling states describe causal perceptions; they are essentially relational, and their elaboration is the process of defining the self. Furthermore, they are clearly

\(^{498}\) Ibid., p 193.  
\(^{499}\) Ibid., p 192.  
\(^{500}\) Ibid., p 196.
constituted by the inner of the processes of physiological change in the context of a changing environment.

The ambivalence crisis occurs when the child recognises that love and anger are directed at the same object:

First, the child feels the pain of frustrated need itself, and the corrosiveness of the accompanying anger. But, given that the child now knows that the object of her anger and the object of her love are one and the same, awareness of her angry wishes will also bring the pain of guilt, an emotion that is now felt for the first time.501

The way that the child will handle the feeling of guilt depends on the way that the child has come to experience the dynamics that eventually give rise to the ambivalence crisis. These dynamics relate the perception of self and world; the way the child comes to perceive and interact with the world arises from the way she has come to perceive herself, specifically how much she has been able to accept her own neediness and imperfection. A parental holding that allows omnipotence and neediness, by providing “suitably responsive and stable care”,502 will allow for the creation of a relationship of trust that defines the way the child both perceives itself and interacts with the world. Interestingly, this acceptance of separateness or difference, allows for the appreciation of difference.

But a good development will allow the gradual relaxing of omnipotence in favour of trust, as the infant learns not to be ashamed of neediness and to take a positive delight in the playful and creative “subtle interplay” of two imperfect beings.503

This subtle interplay engages the third facet of infant experience that Nussbaum draws from Lucretius, that the relationship of the infant to the world is also inherently one of wonder and interest, invoking an exploratory stance, which Nussbaum mentions is

501 Ibid., p 214.
502 Ibid., p 193.
503 Ibid., p 196.
usually underemphasised by psychoanalysis, which tends to focus on the need for the removal of pain and disturbance. Thus, she maintains that

we need to posit an original need for cognitive decision-making, and an original joy in sorting out the world, in order to explain why infants get going and pursue projects of their own in an uncertain world.\(^{504}\)

The way that we come to perceive and experience our own separateness relates directly to the quality of our exploration of the world, the delight we come to take in difference. Difference, therefore, can be a source of delight as well as a source of pain. The inner experience of difference, through the development of feeling, partakes clearly, then, in the paradox of freedom and determinism that is well expressed in process philosophy, and particularly in hierarchy theory, that limits create both potential and restriction, and the balance of these, of order and disorder, is required to optimise the development of the self as a semi-autonomous system. Acceptance of the limit, say the perception of separateness occasioned by helplessness, allows for taking delight in the uniqueness of the ‘subtle interplay’ that is made possible by the existence of difference.

Importantly, there is apparently no avoiding the ambivalence crisis. Yet if the interactions with the world have provided enough care and stability for a feeling of safety, with enough freedom for some independent exploration, then the child will have accepted to some degree its own imperfection, along with the imperfection of others; indeed it is this imperfection that makes possible the pleasurable subtle interchange.

The concept of interchange implies reciprocity, an important aspect to consider, particularly with regard to the actions by which infants communicate their needs. As Chapple maintains, an individual is born with a set of unique rhythms, which adjust and are elaborated upon in interaction. Psychological approaches to emotion recognise this in the existence of temperament.\(^{505}\) Different infants have different needs, to which parents and caregivers must adjust, and even from birth different

\(^{504}\) Ibid., p 190.
\(^{505}\) Keith Oatley, Dacher Keltner & Jennifer M. Jenkins, *Understanding Emotions*, p 308.
individuals may be more or less suited to one another. Interestingly though, the emotional expressions of infants can alter quite radically in the first year of life, suggesting a high degree of elaboration in interaction. For instance, individuals who express and presumably experience a high degree of distress early on might come to exhibit much lower levels of distress in an environment of harmonious and responsive interaction, particularly with the mother or primary caregiver.\textsuperscript{506} This may suggest that the phases of the need for adjustment in relation to external circumstances have been responded to in a way that supports an increase in joy and a decrease in fear during the emergence of the sense of self in these feelings. We might speculate that the interactions that support this do not necessarily change the underlying disposition, but demonstrate acceptance of the infants in all their modes of expression, in a way that facilitates the development of a secure sense of self.

In the event of a history of interaction that has supported the individual child well enough, the response to the feeling of guilt occasioned by the ambivalence crisis takes the form of some kind of atonement.

In other words, catapulted into a kind of rudimentary thought by the pain of having injured someone she loves, the child comes up with the ideas of justice and reparation. Gratitude and wonder already turn the child outward to some extent. But it seems plausible to suppose that much of the intensity and urgency of its transactions with others is fuelled by the sense that something very bad must be atoned for; and this means that the very badness itself can be made a source of good.\textsuperscript{507}

However, if the child has not been able to accept its own imperfection then the emotion of shame is more likely. Nussbaum’s summary of the possible attempts to resolve the ambivalence crisis, and its part in general development is worth quoting at length.

\textsuperscript{507} Martha Nussbaum, \textit{Upheavals of Thought}, p 215.
From this point on, the child agrees to live in a world in which others make legitimate demands and one’s own desires have appropriate boundaries. If one oversteps those boundaries, one must pay a penalty; and insofar as one forms aggressive wishes toward others, one must struggle to limit the damage those wishes do, and to repay the objects of aggression by creative and benevolent efforts. But because those moral demands rescue the child from helplessness and depression, they are at the same time welcome demands. Moral guilt is so much better than shame, because it can be atoned for, it does not sully the entirety of one’s being. It is a dignified emotion compatible with optimism about one’s own prospects. The structure of morality thus performs a “holding” function for the child, giving her a feeling of safety. In this sheltering structure she can play and exert herself.\(^{508}\)

Notice that my account gives an important role to both shame and guilt; but it sees guilt as potentially creative, connected with reparation and the acceptance of limits to aggression, whereas shame, at least shame of the primitive sort, is a threat to all possibility of morality and community, indeed to a creative inner life.\(^{509}\)

The use of these kinds of ideas in a comprehension of morality is central to Nussbaum’s project following the presentation of her neo-Stoic view of emotion. Although Nussbaum emphasises the role of early development, she still leaves room for a major role for broader social structures and institutions than the immediate family or closest caregivers. However, her narrative of development highlights some basic considerations about morality in relation to human nature, as it develops within somewhat predictable ranges. For instance, this view of development supports her claim that including the possibility of reparation in the organisation of human life and society at any level will be more effective for everyone, and that shaming practices will generally be ineffective.

Nussbaum’s account of early development, particularly in the context of this thesis, allows us to understand the sense of self as completely relational. Whilst feeling may

\(^{508}\) Ibid., p 216.
\(^{509}\) Ibid., p 218.
be seen as initially constituted of the inherent and unique disposition or temperament of the individual, necessarily within the range of the possibilities for the human form, the interactions that elaborate these dispositions and are interpreted as feeling begin from the moment of birth. The attempts to adjust, observable in outward behaviour are attuned by the repetition of situations, at first very generalised. The sense of self as feeling describes a belief about the relation between the self and the world, and any differentiated feeling we might describe, such as fear, is in itself a description of a causal relation. Thus, the ways that interactions and the feelings that emerge from them tend to repeat early in life may be seen to determine much about the experience of both the self and the world. The attempts to adjust that become patterned through interaction may be seen as the most basic kind of habitus. This idea has much in common with some psychoanalytic views, such as those of John Bowlby, who proposes that early relationships leave an imprint that affects all other relationships in which the individual engages through life.510 This is a strong claim, yet it is backed up by the neuroscientific understanding that explicit memories are not formed before about age three; we might assume, then, that prior to this, actions are organised and understood in the experience of feelings. Whilst quite complex sequences of, say, physical actions might be already learnt, this learning takes place through repetition and the consciousness that might guide such learning is based entirely on feeling; thus, the child seeks to both fit in the world and fulfil the natural impetus to explore, and how a given individual does this will be an adjustment according to feeling, without conscious reflection, in a way based almost entirely on what has worked before and avoiding what has not worked.

If we return to Bourdieu’s definition of habitus we can see that it can describe very well the concept of unconscious appraisal of situations. Thus, in Chapter Five, habitus was defined most clearly as “a system of acquired dispositions functioning on the practical level as categories of perception and assessment or as classificatory principles as well as being the organizing principles of action.”511 Habit is a way of categorising situations and interactions, observable in its outward relation in the actions of a given individual. Making the link to emotion as action that seeks to adjust

inner functioning below the level of consciousness and Nussbaum’s view of emotion as evaluative cognition that is eudaimonistic allows us to posit habitus as deeply relevant to an individual; the entire sense of self is based on it. In many senses, habitus is constitutive of who we are, based on our entire ontogenetic trajectory.

Habitus is, then, a gestalt appraisal of situations that inherently involves purpose. Linking habitus with the understanding of outwardly directed action that has been developed in this and previous chapters, and the feelings that emerge in present situations does away with the need for positing motivation as separate from action. The self is continuously interacting with the world, and habitus may be seen as essentially the mode by which positioning is sustained such that the sense of self and the sense of the world survives. It is a fit of the self to situations that means that the self can continue to recognise that both itself and the world are as believed, based on past experiences.

This may be seen as a deeper and more individualised version of Bourdieu’s symbolic power. Development through the ambivalence crisis is understood to shape our very basic sense of our own power, and this continues in habitus, through the elaborations by which individuals learn ever more detailed actions, as a set of fundamental beliefs about how we might affect and be affected by the world. The need for secure and reliable beliefs at this level may be related to the most fundamental possibilities of the human being and developing a sense of self, that we may experience separation and connection, and we must mediate these possibilities by seeking to fit as best we can in the world, as much of the time as possible. This allows us to accept both ourselves and the world, and it must be remembered that the strongly weighted early development occurs as boundaries are being established, some of it before any sense of boundary whatsoever, so in a fundamental way, maintaining positioning maintains both the sense of self and the world.

The concepts of habitus and the action of emotion provide for the important recognition that this mode of functioning, at the level below conscious awareness continues through the life cycle; rather than diminishing, it may in fact be strengthened. This relates very clearly to Bourdieu’s claim that we know not what we do, yet, if we pause to reflect we might know only that certain modes of adjusting in
situations seem right and seem like ourselves. The sense of self is essentially a sense of the way things seem to be going in our lives. At times, we have strong feeling experiences that suggest to us more extreme forms of fit or lack of fit, and at such times we can consider feeling as information upon which to make choices. Yet, as Nussbaum mentions

But for many people the conscious valuations of daily life serve also as a mask worn in the presence of oneself; deeper emotions persisting from childhood operate, and motivate, in ways that the person may not consciously understand. When these emotions manifest themselves, or when their motivating activity is made clear, the person may well feel as if forces of a noncognitive kind were pushing her around: for the cognitive content of these emotions may not be available to her, and even to the extent that it is available it may have an archaic and infantile form. Moreover, it may not match at all the thoughts about the value of objects that she is aware of having. And she may stick to her view despite her conscious thoughts and the evidence before her.512

Whilst feeling is an interpretation of patterns from the past and below conscious awareness, it is nonetheless a gestalt experience and feels like the present. It actually occurs in the present; the repetitive aspect from which action arises is not ‘part of’ it, but rather a lower level. Extended consciousness essentially seeks a best fit between the experience of the self in the present, as feeling, and the conscious perceptions of current situations. Without understanding the way the self develops and functions and the role of repetition in this process, it would not make sense for extended consciousness to explain things in any other way.

Of course, many, perhaps most, of our everyday actions and experiences do not need to be deeply questioned; habitus fulfils a positive role of allowing us to generally accept ourselves and the way the world is, and a highly individuated life would be impossible without this. Without habitus, there could be no self. Furthermore, habitus may be seen as relevant to everything we do, even the more mundane actions and tasks in which we engage and by which we position ourselves. Yet seeing these as

inherently purposeful and relevant to the continued survival of the self makes the distinction between the action of emotion and other kinds of action, as already mentioned, less important.

The more important actions, those from which stronger inner experiences emerge are simply more crucial to the survival of the self, and what these actions are depends on circumstance; if basic physical needs cannot be met strong feelings will emerge. It may be reasonable to say, though, that once basic needs such as for food, water and shelter are met, the most important actions, those that are most relevant to our positioning and therefore our sense of self occur in relationship with other human beings, simply because we have developed our sense of self in these relationships, and our unique sense of ourselves, a relation of positioning, is invoked in some way in every interaction with another person.

Furthermore, the more detailed and complex actions and positionings we might have learnt, even those learnt through conscious forms of repetition, are made possible by the basic ways in which we are positioned in the world, which are strongly based on early relationships, and then elaborated upon in many and varied contexts. At this point, though, it is important to be clearer about the role of extended consciousness and the relationship between extended consciousness and feeling.

It has already been mentioned a number of times that extended consciousness can override the impulses to action below conscious awareness. By doing so, feeling, as the interpretation of the self acting, is altered. This can be assumed to occur in two ways, conceptualised through the concept of harmony, which can take into account both difference and sameness, and a sense of optimal balance of the two. It describes change that fits well enough between levels such that tension never becomes so strong as to create collapse of the whole. Harmony expands upon the idea of fit.

The development of extended consciousness as the highest inner level of complexity makes possible the comprehension of a vast array of types of situations, and offers such increased flexibility of responding to the world that it is difficult to imagine human life without it. Learning to categorise situations, particularly through the metaphors of language, can, for the most part, provide the possibility for harmonising
the self as one whole process with the world; indeed, such detailed reappraisals of situations may be assumed to temper the often extreme feelings of young children, as they develop a higher level understanding of the world. Thus, as adults, we can reflect on our action and adjust accordingly, choosing conscious responses over unconscious patterned action. Thus, the need to adjust inner levels below conscious awareness is found in competing impulses to action at this level, and we might begin these actions or simply have a sense of the need to adjust, only to reappraise a situation and alter our course.

For instance, we might experience the startle response described by LeDoux. As functioning below conscious awareness changes we simply find ourselves adjusting our bodies. A feeling of closedness, the need to alter or withdraw from a situation, emerges as the feeling of fear. Yet, in the case in which no genuine threat is present, the following conscious appraisal redescribes the situation, and a decision can be made to act differently. Feeling, emerging as the inner of the already instantiated action, alters; the experience of fear abates in the context of the higher level description, and the self as a whole comes into greater harmony with the surrounding world.

Yet overriding unconscious impulses to action can also result in greater disharmony within the self. The general understanding of situations, below conscious awareness, is potentially quite different from the specific comprehension learnt later. Thus, even though action may be prevented by higher level understanding, the external situation might continue in the same way; the positioning implicitly understood continues. In such cases, feeling may be minimised by the disparity between the upper and lower level because the action does not occur. Yet the pattern of implicit appraisal remains, as impulse to action, and some sense of self as relation may be present and should be accessible to consciousness, even if it is simply a feeling of lack of fit, unease or tension, something ‘not right’.

However, feeling may disappear altogether; there may be a basic awareness of acting but nothing more. This is evident in cases such as denial following extreme trauma. In such cases the role of extended consciousness is very logical, in the sense of facilitating the survival and maintenance of the self; extreme fear responses in
everyday life as a result of past interactions are not sustainable. Yet the patterns of implicit appraisal remain and may be assumed to result in the avoidance of many situations, completely unconsciously; thus, there is some action to adjust but the purpose of it never becomes clear to a person. Phobias might be an example of extreme cases.

Modes of redescribing the self in relation at the level of extended conscious may not be the result of a particularly difficult or traumatic experience, but rather ways of describing the self that have been learnt repetitively enough to prohibit expression in action. A very general example may be seen in the manner by which gender roles in relation to feeling are taught to young children in a given culture. For instance, in some Western cultures at this time, girls are not encouraged to express anger and boys are not encouraged to express sadness. Even though families will differ widely in their unique cultures with regard to such expression, some individuals will naturally suit more whichever mode is taught to them and there may be some underlying gender dispositions, there is no doubt that some individuals are taught that particular modes of expression are unacceptable. We might imagine this as forming implicit memories of painful or threatening changes in external circumstances in relation to their expression, such as extreme disapproval from loved ones. We might assume, also that some individuals manage their responses by continuous conscious redescription. In this case, impulses to certain kinds of action, including expression, may occur but they are only minimally or no longer present as feeling.

Alternately, extended consciousness may affirm feeling by altering description to suit the external situation well enough to justify feeling and allow for its expression in action, thereby maintaining and reinforcing current positioning. For instance, a person who experienced one of their immediate caregivers as overly dominating and controlling may tend to find himself in similar positionings in his life as an adult. Interactions in which this person feels somehow thwarted, even in apparently minor ways from the adult perspective, will reengage the patterns of appraisal of situations learnt earlier and it is likely that the person will unconsciously need to exert their own dominance in a manner disproportionate to these situations; the self in relation is already disempowered. Anger, as the differentiated feeling as this relation occurs in the present may be accepted into conscious experience to some degree by describing
the situation such that conscious appraisal agrees. This may be seen as essentially a projection of the pattern outwards; it will be seen as genuinely and completely causing the current response in action and feeling, and the situation will be seen as wrong or unfair, any other parties as rude, ignorant or dominating themselves, for instance. This has the paradoxical effect of resolving tension to some degree in the present; the person will probably feel better for a time, and indeed, justified, yet given that the underlying general positioning based on past interaction is not recognised, it is most likely that the same kinds of appraisal will continue in future situations, strengthening the basic sense of self as disempowered in some way. Such dynamics will be clarified in the following chapter, in relation to the underlying ontology of change discernible as inner aspect and outer aspect.

All of these ways that extended consciousness maintains adequate harmony between the inner and outer aspects of self may be said to demonstrate some degree of non-acceptance of self in its most basic form as feeling. Extended consciousness manages feeling by managing action, which can either encourage or discourage the degree of feeling present as the self moves through situations. The impulses to action may be seen as gestalt appraisals of situations that are not based on the believed boundaries of the self; they are beliefs about how the world is. The self emerges from the interpretation of these in relation, beliefs about the ways we may or may not have an effect. Maintenance of the self in relation that does not accept this level of self and must override or redescribe feeling paradoxically reinforces unconscious appraisal and therefore inhibits possibilities for learning and development.
Chapter Nine
Metaphorical Experience

The discussion and critique of the work of Lakoff and Johnson in Chapter One of this thesis suggested three areas in which their ideas required elaboration to better conceptualise the relationship between experience and metaphor. The first was to articulate a basic ontology capable of moving beyond the division of subject and object and, following this, the second, to be able to describe the emergence of consciousness from nature, that is, from processes that are not conscious. Finally, it was argued that such an altered ontology and a theory of nature and consciousness commensurate with it, should offer a mode of speaking more clearly about feeling. This thesis has addressed these three areas in detail, yet still needs to explicitly apply the theory developed to the specific problem of Lakoff and Johnson’s conceptualisation of experience, which will in turn further develop the concept of feeling.

Lakoff and Johnson are clear that altering metaphor can alter understanding, but less clear about the effect of this on experience. This is at least partly due to their schematising of metaphor as based in natural kinds of experience, which seems to contradict their contention that there is no direct, immediate experience. The problem of the ‘underlying experience’ that supports conceptualisation through metaphor is addressed somewhat by Johnson in The Body in the Mind, but the focus on the interactions between the physical body and the world, particularly through the interaction with objects was noted as a limiting factor that should be addressed.

According to the hierarchical theory of consciousness that has been presented thus far in this thesis, experience begins with feeling, through the perception of difference. With regard to this initial perception, the experience is an understanding and vice versa. It is simply a part of being human that we will, very early in life experience the perception of difference, the fear that this engenders and the need to be comforted as a result. It is assumed that every human being follows to some degree the parameters of development through to the ambivalence crisis outlined in the previous chapter. However, there is enormous potential for variation in the type and frequency of care
given; different infants will have different rhythms of these needs, and different caregivers will meet them in very different ways. This can begin to account for both similarities and differences amongst different people, even in their early experience of themselves and the world.

Implicit appraisal, observable in outward actions, has been presented as automatic without being mechanistic, but also elaborated upon as implicit memory enlarges the contextual sphere to which particular changes become connected. This might be seen as the development of categorisation; situations are understood in terms of various types, and the understanding is itself the change; no conscious cognition occurs. Over time the categories both expand and become more refined.

Change can only be perceived in relation, and once this happens the self is present, even if in a simpler or less developed form than the older child or adult self. The self is first present as feeling. As the infant encounters more and more situations of different types, feeling is elaborated upon as changes in the level below consciousness and emergent modes of action are interpreted in relation to external situations. This view highlights that our most basic experience, feeling, is an interpretation. The level of feeling, then, is well described as metaphor. It is worth recalling Lakoff and Johnson’s view that categorisation and metaphor occupy a continuum, rather than always being distinctly different. Thus, the repetitive aspect of implicit appraisal suggests that such appraisal is more like categorisation than metaphor, whilst feeling as an interpretation of this in relation to different kinds of situations, particularly given the contextual nature of implicit appraisal, seems better conceptualised as metaphor. This makes our experience, of ourselves in the world, our feeling, by its very nature a metaphorical experience.

**Experiential Co-occurrence and Experiential Similarity**

This characterisation of implicit appraisal and feeling provides insight into one of the major problem areas for Lakoff and Johnson, who say that
In all actuality we feel that no metaphor can ever be comprehended or even adequately represented independently of its experiential basis.\textsuperscript{513}

Yet they also clearly state that “We do not know very much about the experiential basis of metaphors.”\textsuperscript{514} One of the major reasons they give for metaphors being projected in certain ways but not others, or for metaphors to hold, is experiential co-occurrence and experiential similarity.

The elaboration of the patterns below conscious awareness, through the development of implicit memories may be described as an example of experiential co-occurrence. All that is required for the repetition of patterns in relation is that they have happened before at the same time as whatever is currently occurring, whether there was ever any causal relation between the initial perceived cause of the change or not.

Feeling provides the basis for conceptualising experiential similarity; we can use certain kinds of experience or understanding to experience and understand other phenomena because, in some way, the feeling of the different kinds is similar. However, and importantly, feeling does not describe a ground of experience, in the sense of an absolute and direct basis. Rather, feeling is itself a metaphor, based on the history of interaction, constituted of the underlying changes that may be expressed as emotion, yet not directly experienced. Yet the tendency to repeat particular patterns, and to experience this inner aspect of the self in relation as feeling always occurs within the human range.

For example, Lakoff and Johnson explain the structural metaphor, ‘Rational Argument is War’ and detail the expressions possible because of this metaphor.\textsuperscript{515} They state that

This metaphor allows us to conceptualize what a rational argument is in terms of something that we understand more readily, namely, physical conflict.\textsuperscript{516}

\textsuperscript{514} Ibid., p 14.
\textsuperscript{515} Ibid., p 61-65.
\textsuperscript{516} Ibid., p 61.
There appear to be two levels at which we might comprehend this metaphor. At the broader level of the cultural instantiation of the metaphor, we might imagine that in the historical period during which this metaphor came into use, there was enough understanding of the rules and dynamics of physical combat amongst enough people for the metaphor to prove useful for comprehending and speaking about rational argument for the metaphor to hold. Yet we might still question why the comparison was made in the first place; obviously in some ways rational argument and war serve similar purposes, yet for the metaphorical projection to ring true to individuals it is reasonable to wonder about an underlying similarity at the level of individual experience and understanding. It can be argued that similar feeling exists between these two different modes by which people engage with one another.

Without the theory presented in this thesis, explaining this in terms of similar feeling sounds like a fundamental basis that Lakoff and Johnson wish to avoid. Yet, feeling as a metaphor allows us to speak about another level of metaphorical, yet prelinguistic experience, that does indeed feel similar, namely the inner experience of the changes that occur in relation to the outer circumstances of both arguments and war, particularly through the dynamics of attack and defence.

Simply because the metaphor exists and is in use at the conceptual level, of language and extended consciousness, we might assume that most people can learn to use and apply the metaphor and terms associated with rational arguments as war, yet each individual’s experience of either phenomena can differ markedly, and it may further be imagined that there will be a range of differences amongst individual’s language choices in relation to this metaphor. For instance, the person who experiences rational argument more strongly as attack and defence, in the sense that argument feels threatening, because that is the way they have experienced it before, might choose to use the term ‘fight’ instead, as the inner experience of both is more akin to their experience, whereas the person who experiences a natural give and take and is less threatened by argument might describe it as ‘debate’. Even though metaphors hold at the level of an entire culture, there is still choice amongst them at the individual level; indeed Lakoff and Johnson describe a number of metaphors that structure our understanding of argument, such as ‘An Argument is a Journey’ and ‘An Argument is
a Container'. The language choices of individuals can be related to their experience, which can, in turn, be described in the way their individual dispositions have been elaborated in their history of interactions. The underlying experiential similarity is both a gestalt and metaphorical.

It is interesting that Lakoff and Johnson maintain that we use those experiences that are more clear to us to understand those that are less clear, which presumably might also influence those ‘less clear’ experiences. Perhaps this is something that mostly occurs at the level of linguistic metaphor, and the reflections of extended consciousness. The experiences described as less clear include those we would commonly term ‘emotional’, or in the context of this thesis, feeling, such as love and happiness. It is possible that these experiences appear less clear simply because they are more different amongst individuals; what I feel, which is essentially my most basic experience of myself in relation is, understandably and quite logically, different from the experiences of others, because my entire and detailed history of interactions is utterly unique. The interpretation of these unique, individual metaphors, in the functioning of extended consciousness, and the major way by which this uniqueness is labelled, linguistically understood and communicated may be described as an attempt to find commonality in the unique. Language, as Chapple describes it, bridges discontinuity. It minimises separation. Yet in so doing, language creates the potential for greater inner discontinuity, or difference between levels, because it must be agreed upon. In this agreement, the uniqueness of the level of feeling may at times, even often, dissipate or be underemphasised. As mentioned, even if the actual inner sensation is similar amongst different people, it cannot be separated from the situations which occasion it, which are necessarily different. For instance, feelings of love and happiness are arguably some of the clearest human experiences, yet the situations that occasion it are infinitely varied. This variation, coupled with the importance of fitting in the world, might in fact mean that often the feeling is minimised by the functioning of extended consciousness, as we struggle to comprehend our experience at the highest inner level.

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517 Ibid., p 90-91.
Natural Kinds and Natural Dimensions of Experience

Repetition is a key concept that can be used to expand upon Lakoff and Johnson’s characterisation of experience, both in terms of unique, individual experience and experience within the human range. This is particularly relevant in relation to the emergence of consciousness, initially as feeling, through repetitive modes of engagement with the world that are not explicitly conscious. Thus Lakoff and Johnson’s concepts of natural kinds and natural dimensions of experience can be redescribed in terms of repetition.

Natural kinds of experience were said to be a product of our bodies, (perceptual and motor apparatus, mental capacities, emotional makeup etc.), our interactions with our physical environment (moving, manipulating objects, eating, etc.) and our interactions with other people within our culture (in terms of social, political, economic and religious institutions). This summary can be reframed in the context of this thesis, in particular the discussion of action. Natural kinds of experience are perhaps better described as natural modes of action, limited by our being in the human form, in a specific culture and, in particular, by our unique dispositions. These are repetitive modes of engaging with the environment, elaborated upon in interaction and remembered implicitly; natural modes of action emerge from repetitive interactions between a unique individual and, in terms of a detailed set of positions, a unique environment. Experience, however, implies some kind of consciousness, more than the simple awareness of acting. Thus, feeling is the interpretation of natural modes of action in relation to current situations. This allows us to describe feeling as already indicated, as both an experience and an understanding. This fits with Lakoff and Johnson’s view of experience as gestalt and basic.

The natural dimensions of experience may be seen as parameters for describing experience, selections of discernible and repetitive aspects of whole situations that are both artificial and genuine in terms of describing relations. These natural dimensions include participants, parts, stages, linear sequence and purpose. Essentially these dimensions may be summarised as descriptions of positioning in action. It is worth reconceptualising Johnson’s image schemata in terms of natural dimensions. Johnson sees these non-linguistic kinds of understanding as analog patterns, based simply on
repetition. He describes them as experiential gestalts, “as coherent, meaningful, unified wholes within our experience and cognition”, yet as mentioned his focus is largely on physical engagement, specifically the interaction with objects. It is important to separate the notion of gestalt, nonlinguistic experience, which has been conceptualised as feeling, and physical interaction. Thus, physical interaction should be viewed as a natural dimension of experience, separable only in description from the gestalt. Once again, the term natural refers to human nature, meaning within the range of human experience by virtue of the form human beings take in the world. Yet the whole inner or feeling of engaging the physical body with the world in various ways must relate the self and world, not simply by the observation of our physical effects on the world through the manipulation of the body and the inner sensing of the body in space, but through the meaning of our actions to ourselves, in terms of what we are trying to accomplish.

For instance, Johnson speaks about the process of the establishment of image schemata for force. Understanding various concepts of force such as compulsion, enablement and attraction, such that they can then be metaphorically projected, is much more than a kinaesthetic physical experience; it relates to our sense of ourselves as able or not, already influenced at a very young age by the nature of holding described in the previous chapter, that influences the way the individual engages the natural tendency towards exploration and discovery, the delight in difference.

Thus, the feeling of, for instance, compulsion, enablement and attraction, relates our history of interactions and our inner perceptions of that history as the self is forming. It is the contention of this thesis that feeling is the most basic form of conscious experience, and always present even if minimised by an outward focus of extended consciousness. Obviously, for the infant engaging with the physical world, the focus is often outwards; part of the whole point of exploration is to learn to negotiate physical processes, yet much learning to use the body to interact with the world occurs prior to the development of language and explicit memory. At this stage, repetitive engagement is best described with reference to Polanyi’s concept of tacit

519 Ibid., p 42-8.
knowing. We might imagine the young child acting without the conscious reflection of the adult, developing tacit knowing about the physical world as she engages in meaningful, purposeful interactions. Even at this stage, though, we can imagine at the very least, feeling as a sense of fit; does the world accept or thwart my actions? At a very basic level of feeling then, even the simplest physical actions can engage the fundamental feelings of joy or fear when our physical engagements with the world remind us of separateness (thwarting or disempowering) or connection (accepting or empowering). Because we feel, in the sense of mapping the self in the world and having an inner experience, before we do anything else, then it seems invalid to assume that our most basic concepts are formed through physical interacting with the world. This is not to say that our bodies and the way we move them do not play a central role in our learning and forming concepts, but rather that these are dimensions of our experience; even if we are absent-minded or engaged in something technical that requires a focus on the physical, we never act for no reason, and the fullness of feeling can take this into account, indeed centralise it. As we learn about the physical world, understanding is already present as feeling and it is this understanding, even if very basic, that precludes the whole possibility of a self interacting with the world and understanding the ways in which the world is differentiated. If we understand compulsion, enablement and attraction in the engagement with physical objects, this is because we already have some kind of inner experience; all of these concepts may also be described as feelings. It may indeed be the case that this is what Johnson means, but the conception of feeling as understanding and further as the belief in a causal relationship makes the point more explicit. Feeling may be seen as both an experience and an understanding of positioning. Feeling is unique and metaphorical and gestalt and completely relational.

Johnson’s focus on physical experience simply emphasises that there are very strong similarities in the human experience because our bodies, in terms of the way we can outwardly manoeuvre them in relation, are very similar. Lakoff and Johnson are aware of this point. However, the centralising of repetition can also provide a deeper conceptualisation of difference amongst individuals. Every single person is always uniquely positioned. An individual human being is born with a set of unique rhythms, which are then elaborated upon and experienced early on at the level of feeling, in relation to this unique positioning. Through the formation of implicit memories, inner
change is connected with an ever increasing set of external circumstances, at the level below consciousness. Implicit memories may be described as the tendency to repeat particular categorisations of situations. The self is the accumulation of the interpretation of these in relation. This line of thinking leads us towards a fuller explanation for why patterns, particularly those established early in life, tend to repeat; we tend to unwittingly encounter the same or similar positioning over and over. This will be explained more explicitly in relation to ontology further on in this chapter. For the moment however, it is important to make the point that, whilst language, as a necessarily shared enterprise, is based on the formation of shared metaphors, conditioning both our experience and understanding, there is yet another, lower level of experience and understanding that may be described as based on the functioning of unique, individual metaphors. Whilst different people may indeed have similar inner experiences, in the sense that it may be reasonable to assume that the actual physical feeling of sadness, for instance, is very similar in different people, the situations that occasion the feeling are potentially very different, even whilst within the human range. The situations that occasion particular kinds of feeling in an individual are as much a part of the individual as the actual physical feeling, because the occurrence in relation is at the heart of the formation of the self. Despite the more general typing of situations at the level below conscious awareness, very specific aspects of situations might occasion an implicit response, even though the response is more general than a conscious evaluation. This point fits with Johnson’s conception of image schemata as basic gestalts, yet also highly structured and detailed. The feelings that arise as the next level of interpretation, then, are our unique, individual metaphors, and they follow the logic of metaphor. In the case of feelings, the experiential similarity that allows for the extension of metaphors amongst different kinds, is the similar change at the constituting level.

**Unique, Individual Metaphors**

The concept of unique individual metaphors describes the detailed set of beliefs that form and develop the self in relation to its own history. Given that people are unique and different, yet must find ways of interacting with each other, there will of necessity be variations in the harmonising of inner levels relative to fitting in the world, yet
fluctuation also allows for the subtle interplay described in the previous chapter. Elaboration of individual rhythms in interaction is necessary and there is therefore no ongoing perfect state of equilibrium; order and disorder are a prerequisite for experience. There are no pure, separately existing individual rhythms once development is taking place. Nonetheless, it may reasonably be assumed that there are a range of optimal conditions of development and types of positioning for a given individual, and that aspects of their actual development in interaction might fall short of these. Thus, whilst there is not an underlying, essential self, there will still be individual metaphors that are more and less aligned with the optimal state for individual development and exploration: some metaphors, some positionings will serve us whilst others will not. Thus, given that we experience ourselves and our interactions through our unique individual metaphors, discrepancy can exist between the self in relation that we are familiar with, essentially because it is who we are, how we have developed through interaction, and an optimal expression of the self in relation. This may be expressed as the difference between the fit between the self and the world, and the fit of different levels with each other; the more closely that interactions fit with individual rhythms, the greater inner and outer harmony. The greater the disharmony early in life, the more disharmony through the life span. Indeed if disharmony cannot be released through action, with or without awareness, it may be assumed to continue as a context for lower level processes, very probably forming the basis for illness and disease in the physical body, which is after all, simply a form of inner disharmony. Conversely, disharmony may be continually released in emotional behaviour, reinforcing patterns over time, and creating recurring experiences of disharmony in the world and a lessening flexibility to deal with situations.

Chapple appears to miss the point that the kinds of interactions, and possible positionings, an individual seeks may be represented as a continuum, between those that have developed in a way that suits the innate individual dispositions and those that are completely patterned through interaction and may never have provided the individual with a sense of inner harmony. For some individuals, perhaps many, their history of interactions is such that they never experienced the sense of fit that makes difference bearable and even joyful. Such individuals experience difficulties in life, over and over, even including those that we would generally consider, in our present
view of reality, as arbitrary or accidental. The remainder of this chapter will aim to make clear that our inner changes are in causal relationship to outer changes, such that we can often discover the meaning of and reasons for the external happenings in our lives, and work to change our inner selves such that we encounter greater harmony both within ourselves and with the world. Becoming aware of our unique, individual metaphors offers the possibility to change them. Those metaphors that disturb us or do not serve us, in the sense that they engender disharmony at some level, can change; they are who we are because they are our history, yet because they are metaphors, there is nothing essential about them.

The self may therefore be seen as a collection of unique, individual metaphors. The patterns of repetition of implicit memory and appraisal provide structure for our conscious experience, most basically as feeling, which then allows for a higher level structuring of explicit memory and appraisal. The repetition, below conscious awareness of appraisals of situations, allows us to recognise situations in the present, as we project categories in the ever-changing unique present. Feeling is both an understanding, as it is defined as relational, and an experience, as it is also a process that we are; it is our unique process. Importantly, feeling as a metaphorical experience occurs between the nonconscious appraisal of types of situations and the situation external to the self, or, once extended consciousness has developed more specific appraisals of types of situations, between the nonconscious appraisals and the explicit appraisals of extended consciousness.

Metaphors of language may be seen as made possible by stability in the world, summarised in a fundamental way by the tendency to repeat that is basic to nature. Thus, we can continue to apply categories and metaphors and understand the world because there is some reliability in our relation to everything outside the self. A similar claim may be made for our unique, individual metaphors; we have, to some extent, a reliable sense of self not only due to our collection of individual history, but also because situations outside the self tend to repeat. Of course, as with process philosophy generally, this point must be considered in relation to dialectics, the fundamental paradox of ontology and epistemology; we cannot assume underlying absolute truths, yet the observations we make based on explicitly held assumptions are no less genuine because of this. This is relatable to the paradox of the
differentiation of any process; limitation is the source of individuation and novelty. The emergence of any new level as a process is also the emergence of a complete new set of relations to all outside of it: a new process is by definition a new interpretation. Change can only be observed in such differentiation of inner aspect and outer aspect, yet change is always of the whole and ultimately unfathomable. Change describes cause, also unknowable. We can only describe the appearance of causal relations, based on observation with reference to the inner aspect and outer aspect.

This thesis has carefully made the claim that the only process that we are completely within is that of our own unique consciousness, placing this in a theoretical perspective that is not idealist or subjectivist, as it is also not materialist, but an attempt to move beyond both. This claim, which is essentially that each one of us is a unique, semi-autonomous process, leads to the point that we can potentially most clearly observe change as of the whole, yet discernible as inner aspect and outer aspect, by observing the inner aspect the self, consciousness, along with the outer aspect, not as simply the actions by which the self relates to the world, but as everything with which we come into contact. It is the ability to make this claim that explicitly differentiates this thesis from all psychological explanation, which by definition does not go beyond the outdated and limited mechanistic, reductionist ontology. Granted, both systems and hierarchical approaches exist in psychology, and indeed in all the fields that have been drawn upon in this thesis; neuroscience, sociology, cultural anthropology and biology, yet such approaches can only come into fullness with an explicit basis in process philosophy. At this time, there simply is no other approach within the Western tradition that clearly moves beyond dualisms of mental and material, subjectivist and idealist. The overall statement intended by this thesis is that external situations we come across, the things that happen to us, even those that appear completely arbitrary or accidental exist in relation as the outer aspect of the self. Describing a situation from the perspective of the self is by no means the limit of description; for any situation a multitude of descriptions are possible. Yet, the descriptions of situations as the outer aspect of the self, as relations, have as genuine a claim to truth as any other description. Furthermore, given the relation between inner aspect and outer aspect, and that so much of our functioning is

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520 See for example, Alan Fogel, Maria C D P Lyra & Joan Valsiner, Dynamics and Indeterminism in Developmental and Social Processes, (Mahwah: Lawrence Erlbaum Associates, 1997).
unconscious and therefore difficult to observe, it is entirely reasonable to infer the patterns of our history by what happens to us in the present.

Of course, as has already been mentioned, feeling as a higher level interpretation of these patterns in the present, is capable of novelty; the self is not determined by its history. At the same time though, we act in the world, in attempts to adjust of which we do not know the full meaning, only that we are acting, and therefore we do engage with the world in an unconscious, repetitive manner; if the inner aspect at this level repeats, so too does the outer aspect, as similar conditions in our interactions for the emergence of feeling in relation. Therefore, the simplest mode by which we can come to recognise historical patterns that are not directly perceivable is by noticing the kinds of situations that tend to repeat and the general positions they involve. This is particularly relevant to situations that we do not like, or that do not serve us in some way.

Tension and disturbance is a natural dimension of existence, natural in the sense that the interplay of order and disorder makes development possible. Tension is part of the balance that allows processes to develop, and semi-autonomous hierarchical systems to exist through a life cycle. In relation to hierarchical systems and the emergence of new levels, tension may be seen to describe a stage, during which limits contest one another until something new emerges. ‘Something new’ may be the emergence of a new level altogether, but can also include situations in which the inner aspect of a process changes to accommodate tension across the border from another level (the minimising of feeling in relation to extended consciousness is one example of this), or levels collapse altogether.

A range of disturbance is always occurring at various levels within and outside of the human self, pushing us to act and engage with the world. Indeed, minor disturbances can be understood as supporting the ‘subtle interplay between two imperfect beings’, encouraging exploration and small forms of resolution in our everyday lives; laughter is a good example of such pleasurable resolution following minor disturbance; a common and unexpected understanding is reached. Yet, in our human lives, disturbance can reach levels detrimental to development, lessening the possibilities for exploration and discovery as we avoid forms of difference to which we cannot
assimilate our sense of self. This is particularly true for strong negative feeling experiences, particularly those that we do not understand, which, given the role of implicit appraisal in the creation of feeling, tend also to repeat. Understanding the levels of process of the self and their relations to external circumstances can help us to identify and change the unique, individual metaphors through which we relate to the world, at the most basic level of our experience. Before further discussion of ways that we might partake of change, possible reasons for desiring change will be clarified.

Excess tension in our unconscious patterns of action and in our feelings creates greater distance from the world, describable in relation to the basic feeling state as fear, the sense of separation, an opposite to and absence of joy, the sense of connection. We seek and like connection and the feeling of joy it engenders, and do not seek or like separation and the feeling of fear arising from it. Even though feelings elaborated upon through experience become genuinely differentiated from these initial perceptions, it will be assumed that experience as a whole, in terms of the whole self, can generally be categorised as engendering either of these two experiences at a basic level. As feelings of a basic fit or lack of fit, it may be assumed that generally, even if feeling is minimised, the sense of fit or lack of fit, is accessible to conscious awareness, even if in the simplest sense of degree of disturbance, feelings of tension or ease.

The idea of seeking connection is not to be confused with a seeking of oneness with the world. Rather than implying the dissolution of boundaries, seeking connection is intended to imply an approach towards a case of best fit with the world. The notion of best fit may find basic explanation in the discussion of infant development, during which the best fit for the developing human can be imagined as the best balance of mediating individual inner change, experienced initially as joy and fear, resulting in the most basic senses of positioning developed through the ambivalence crisis. Both the earlier mediating by caregivers of the need for comfort and reassurance, and the later possibilities demonstrated for accepting boundaries in the world as the child moves through the ambivalence crisis and comes to accept, in a way, the very existence of the outside world as separate from her, influence the way the developing child engages the natural tendency towards exploration and discovery. If we imagine
a case of best fit, such that this natural tendency can be engaged in the optimal way for a person, we can imagine a relation to the world that, through the subtle interplay that is made possible, provides both simultaneous inner and outer development. As a child engages with the world, he discovers not only the world, but his own inner experience of it, himself. Furthermore, this discovery is potentially delightful and can occasion the feeling of joy.

Importantly, it is not assumed that an individual who is positioned in various ways that fit better, both in terms of inner harmony amongst levels, and outer harmony with situations in the world, has inherently better experience or understanding of herself and the world than the person whose positioning is less optimal. All experience, of people and situations in the world is inherently and equally valuable, simply because of its uniqueness. Within the human experience, however, it is assumed that, simply due to the form we take in the world, and the experience that develops as the inner aspect of this form, this relation, a sense of connection brings us closer to ourselves and the world in a way that we like, simply because joy, imaginable as the absence of tension, is the natural preference for our form. Rather than seeing this as an optimal higher purpose, in the sense of pure joy, we can imagine that approaching a sense of connection and the feeling of joy, opens us more to the world and to ourselves, creating the space for greater discovery. Without positing absolute foundation or purpose in existence, we might nonetheless relate this opportunity for greater discovery to the underlying whole of change and the observation that change tends to take ever more forms discernible through the dialectic. We might also posit the joy occasioned by a sense of connection, of inner and outer harmony, in relation to the self as a semi-autonomous system, as the potential for continual developing and learning through the life cycle. The general development of a system follows the path through greater order until the balance is tipped and order becomes a limiting factor, at which point senescence begins. The openness to the world and to inner experience that a natural tendency to seek connection and joy can engender potentially means that the optimal balance of order and disorder, that allows for inner and outer development, can be sustained for much longer than if there was no preference for inner and outer harmony.
Change

This thesis has offered a mode of moving beyond an absolute distinction between the mental and material, subject and object, and argued that only a fundamental ontological shift makes this possible. It has offered a view of understanding and experience that begins as the most basic level of the sense of self as feeling, in which understanding and experience are a gestalt and which follows the same logic as linguistic metaphor. Indeed, given the theory of the emergence of consciousness from nature, and in particular the role of interpretation in the emergence of any new process, based on the biosemiotic perspective, it is rather more accurate to say that linguistic metaphor follows the same logic as the emergence of other natural processes, most observable in the creation of umwelts. Metaphor may thus be seen as a natural process.

Yet it may also be said that human consciousness in its highest level of complexity, termed extended consciousness, provides the possibility for much greater substitution amongst possibilities than perhaps any other natural process. We can actually alter our understanding by consciously altering our metaphors. This possibility, however, is limited by stabilities in the world and in the developments of human culture and language, all of which constrain linguistic expression; there may be an infinite number of possible descriptions in language, but only some of them will describe the world adequately. This includes the ways that the self develops as a human form, in a cultural position and as unique, individual metaphors. Extended consciousness must interpret these in relation, whether or not we are explicitly aware of them.

Lakoff and Johnson mention that change of linguistic metaphors generally occurs at the level of structural metaphor; one highly structured concept is viewed in terms of another. Changing orientational, and particularly the more fundamental ontological metaphors, is more challenging as the reverberations through our entire conceptual system are much greater. Yet this thesis, in line with process philosophy generally, offers a new ontological metaphor, along with the claim that this new metaphor supports theories of consciousness in the world, and the development of the human self that should provide the possibility for changing our actual experience, not only in our inner experience of ourselves in relation, as feeling, but also in the external
circumstances we come across. This point is particularly relevant in relation to the theories of Bourdieu and Chapple, who offer very little in terms of suggestions for identifying and altering aspects of habitus. The remaining goal for this thesis, then, is to describe ways we might effect such change, in a way that is commensurate with the theories presented.

Two points must be made in relation to changing our experience. Firstly, this thesis offers a theoretical change in underlying ontological metaphor. Therefore, the most basic change that can be made by an individual on the basis of this is at the level of explicit, languaged understanding. A theory on its own can only offer a change in conscious appraisal. The second point follows from this, and relates to Lakoff and Johnson’s claim that a new metaphor becomes a new reality when we alter our behaviour accordingly. Yet given the relations of action, feeling and extended consciousness, choosing to alter our behaviour, whilst no doubt effecting some change, may not be enough.

Change of such a basic level understanding of the world can only reasonably be assumed to occur as a combination of theory and practice. This returns us to the concept of dialectics, which has underpinned the approach of this thesis; change occurs by attending to both experience and understanding, noticing the way experience might change in the context of altered understanding, and then noticing whether a new aspect of experience remains comprehensible in the context of the current understanding. Of course, we can consciously choose to alter our experience by myriad choices in daily life, yet at a deeper level, in terms of what we come across no matter what we consciously choose and how we feel in relation to this, we cannot consciously alter experience; we can only choose contexts for our action and hope that the experience we are seeking emerges.

Thus, the process by which we might effect change in our experience at the level of feeling involves both consciously interpreting the world in a new way and observing both the inner aspect of the self as feeling and the outer aspect of the self as external situations. The self has been conceptualised as a hierarchy of processes in semi-autonomous relationship with the world, with the emergence of consciousness as feeling and extended consciousness, the two highest inner levels of complexity.
Changing the experience of the self must relate the whole self differently across the border with the world, and the best way to conceptualise this is as the creation of harmony between inner and outer aspects. Thus, change is most perceptible when we find our experience and understanding at both the level of feeling and that of extended consciousness to have changed, and most verifiable when the external circumstances we come across, as the outer aspect of the self, have also changed.

Arguably the most fundamental shift occasioned by the metaphor of change, and observable change through the dialectic of differentiation, expressed as inner aspect and outer aspect, is in the attribution of cause. In its application to situations of daily life our entire orientation to situations is substantially altered. Any given situation, and in the context of this thesis and the desire for change, particularly those that affect us strongly in a way we do not like, does not have a single isolated cause. Yet extended consciousness, operating in the present and without explicit knowledge of implicit appraisals, in particular their historical basis, tends to attribute simple, linear relations of cause and effect in the present. This may be understood as an elaboration of the processes of implicit appraisal and the creation of memory, which link contexts to inner experiences, whether or not they are at all causally related, in the most basic sense of ‘when this, then this’. As mentioned in the previous chapter, the development of the sense of self as feeling is completely relational and therefore not separable from understanding about how we may or may not have an effect in the world. The repetitive physical interactions with objects that teach us ways we might have an effect through our bodies are a dimension of our whole experience and always involve purpose. They may be seen to elaborate the understanding of cause and effect in the present. The linear perceptions of cause and effect may then be seen as cemented in the environment of Western culture; most of the language and concepts we then explicitly learn are based in a substantialist, mechanistic and reductionist world view. Thus, it is not surprising that we tend to ascribe causes of feeling directly to situations outside us, indeed usually only to one element of a situation; a person or an object.

The contention of this thesis, supported by the theory that has been developed, is that altering the attribution of cause can instigate a new process by which the self interacts with the world, which can eventually come to support the underlying theory. The process is essentially one of reflection and observation, and before outlining the steps
involved it is worth noting that this is a completely natural process in which many people naturally engage, without necessarily being consciously aware of it themselves. The process, if defined somewhat artificially, begins from altering the attribution of cause and follows successive iterations of explicit redescriptions and observations of feeling in relation.

Given the ontology of change, and discernible change through the dialectic of inner aspect and outer aspect, altering the attribution of cause is best described as a suspension of the adherence to explanations entirely in terms of linear cause and effect. The move is from an explanation of causal relations such that a present person or situation entirely causes a current feeling, to viewing the situation as a relation to the self and therefore in causal relationship both with the present and with past experience, accepting also that we can never know the ultimate reason for anything, as change is not predictable. For the sake of simplicity, we might describe this in the context of a relation to one other person. Thus, the initial stance is essentially, in the case of experiences we wish to change, of blame; ‘this person causes my experience’, and shifts not initially to a clear ascribing of blame elsewhere, but to a suspension of blame in the present. Even such a simple change, made consciously, can effect some change in a situation. A person becomes more open and questioning rather than fixed in a positioning that also renders their actual experience fixed.

The redescribed perception of the situation then alters the context for feeling and should result in some inner change, either at the level of feeling or action. Effectively, the suspension of fixed description at the highest inner level of complexity can allow for an increased sense of the need to act or a more differentiated feeling; the sense of self at this level becomes more apparent in consciousness. For instance, a person who experienced an overly dominating or controlling relationship with an early caregiver might choose to suspend a current explicit description of a situation in which he is experiencing something similar. A stronger impulse to action, say to dominate the situation themselves, will be interpreted at the level of feeling as either simply the impulse to change the situation (in this case, by dominating), or an increase in differentiated feeling (in this case, anger). Both make more explicit that the feeling is disproportionate to the situation; more information is available for interpretation in extended consciousness, which can then reflect more accurately on the situation or at
least ask further questions, for instance why one is so angry, or why one has such a wish to dominate. If a person can at least entertain the possibility that what occurs outside is causally related to his inner experience in the way that has been suggested in this thesis, he can begin to search for possible explanations for his own current positioning, for his unique, individual metaphors. Again, the stance is generally one of questioning. Once the higher level of extended consciousness is open to redescribing by observing feeling in the present situation, the potential exists for searching amongst descriptions with the guidance of feeling. For instance, once the person identifies his own position in relation to past positions, feeling should change again. Perhaps an explicit realisation occurs about his own repetitive positioning within family dynamics and anger gives way to fear or sadness as the sense of separation is intensified. Resolution can occur as tension is released; even allowing feeling into consciousness releases some tension. Eventually the perception can occur that whatever occurred in the past is not the present. A complete understanding that past patterns occur as a present relation to situations is possible when the pattern is fully allowed into consciousness initially as feeling but supported by the redescriptions of extended consciousness. Greater harmony between the inner aspect and outer aspect is reached and this is known to the individual by an alteration in feeling, most basically as a greater ease in the same or similar situations and a greater openness to situations. Yet given the unconscious nature of implicit appraisal, the verification that a past pattern has been released occurs most observably and concretely when the particular positioning no longer occurs; the same situation is experienced completely differently or, more likely, it simply does not occur. This concept of redescribing is by no means new; many forms of therapy involve this. What is new, however, is the commitment to the ontology of change, which allows us to posit that existence is observable as differentiation, but at a deeper level change is always of the whole. We can observe that we are deeply and fundamentally connected with everything outside ourselves, not by completely explaining this, but by offering the prediction that situations, even those apparently arbitrary or accidental, change when we change the inner aspect of the self by reflecting on feeling and explicit descriptions in relation to situations in the manner described. We are genuine agents of change as whole processes in relation to all that exists, and we can change the outer aspect by changing the inner aspect. This is not a statement about perception; it is a statement about reality.
This discussion of the process of change has been presented in a simplified form, yet our positioning in relation and the circumstances we come across may be much more complex than has been described. Nonetheless, the intention is to describe principles of change. The following summarises principles of change of experience and understanding:

1. Suspend explicit understanding by assuming the ontological metaphor of change as ultimately unknowable, yet discernible as inner aspect and outer aspect, in line with the most basic differentiation of process and relation. Practically, this expands explicit consciousness as a context for feeling, as a stance of questioning. Thus, a person might ask herself how a situation might be understood in terms of basic positioning and how such positioning may have already repeated in her life.

2. Observe experience of feeling. The alteration of the context for feeling is already a change in the situation, and the effect of this change in conditions is to expand the range of feeling possible. This allows for a fuller experience of feeling as the interpretation of implicit appraisal in relation to the present. Practically, a person can attend to the feeling, either as action is underway or as impulses to action are occurring. A broad range of intensity and differentiation of feelings are possible, from a basic sense of degree of tension to a more differentiated feeling.

3. Seek understanding through redescriptions of positioning. Lower level changes in feeling, as constituents for higher level consciousness, may be seen to guide the redescription of positioning toward greater accuracy in terms of identification of patterns from the past. Practically, as a person shifts explanation of a situation the stronger and more differentiated the feeling, the more closely their description matches the positioning inherent in the past pattern of appraisal. This is an iterative process that may be seen to release tension, as it is essentially a process of bringing levels of description into greater harmony, even if the process involves heightened negative feelings in some stages. As tension is released, the higher level description is
clarified. This iterative process may be seen as substituting individual metaphors and observing their effects on the experience of feeling.521

4. Observe change in outer circumstances as a way of grasping that the experience and understanding of the whole self has changed. One way of conceptualising this is to view feeling as already mentioned, as a gestalt experience and understanding, and to view extended consciousness as a higher level understanding, which, as the highest inner level of complexity, relates to the whole experience of the self, in terms of the situations in which a person finds himself. Thus, outer circumstances that have changed may be seen as the outer aspect of a self in which levels have come into greater harmony. Feeling, as the most basic sense of self, has altered, as have the actual situations the person comes across.

These principles describe the dynamics of change, as process and relation, with regard to the experience and understanding of the human self in the world. They do not describe a ‘therapy’ as such, even though, as mentioned, people may follow this process naturally in their lives. At the same time, the process of changing in this way has been presented in a simplified form. Engaging such a process brings the sense of self into question, because it too changes and such change can be experienced as destabilising and indeed threatening to the survival of the self; we are familiar with who we are even if some aspects of our positioning do not serve us. Thus, the seeking of various therapies and experts is reasonable and worthwhile, yet given the proliferation of therapies in Western culture at this time and the variety of competing claims for change, and particularly also that many therapies are not based in any kind of rigorous theorising, the potential for confusion is enormous. The theory offered in this thesis can offer a mode of understanding why those that appear to work for people do effect change and, conversely, what might be lacking in other therapies. In terms of a context in which to evaluate the effectiveness of therapy, it is assumed that the most effective therapies will explicitly include three aspects of the principles outlined. Firstly, a change in the attribution of causal relationships, such that situations are no longer understood in terms of simple, linear relations of cause and

521 The manner in which feeling changes in relation to conscious description is well described, through numerous therapeutic examples, by Eugene Gendlin. This mode of conscious redescription and observation of feeling is central to his conception of a therapeutic process, which he terms ‘focusing’. Eugene T Gendlin, *Focusing*, (New York: Bantam, 1979).
effect, should be at least implicit. Secondly, change involves redescription at the two
levels of feeling and extended consciousness; both feeling and conscious explanations
should change, and thirdly, outer circumstances, in terms of what a person comes
across in her life, should also change. These final points will be described more
clearly in the conclusion of this thesis, in relation to the criticisms made of self-help
and positive psychology in the introduction.
Conclusion

The possibility for significantly changing the experience of the self suggested in the previous chapter, and supported by the entire theory developed through this thesis, offers a context for considering various forms of self-help and psychological therapies. It was suggested that the most effective therapies would be aligned with the theory presented in this thesis in three key ways; the understanding of causes of situations should not be limited to linear relations of cause and effect, and both feeling and explicit understanding should change, along with the external circumstances in a person’s life.

In this context, the flexible optimism suggested by Seligman as a strategy for improving one’s life may be viewed as a change of explicit appraisal; it centralises the alteration of conscious descriptions of situations. This strategy expects that feeling will also change, but only as it is caused by thoughts. Thus, if feeling, such as depression persists, then we should simply continue adjusting our thoughts. There appears to be little sense that feeling offers different information from thought, as a genuine understanding of a situation. Conversely, the conception of feeling presented in this thesis views feeling as a more reliable source of information about the self than the explicit appraisals of extended consciousness. Even though feeling is a more general understanding of situations, it is assumed to be the reengagement of patterns developed in the past, interpreted in the present. In this sense, if feeling is present, even if in a very simple experience of tension as a sense of lack of fit, it should be considered a general account of a situation that is true for the self, given its history of interactions. Explicit appraisal, on the other hand, has the possibility for much greater substitution amongst explanations, along with the potential for overriding feeling and impulses to act, meaning that it is difficult to know how accurate our conscious perceptions are as descriptions of a given situation and the position of the self. If we do not have a strong sense of feeling in a given situation, we cannot really know whether this is because the levels of the self are in harmony with one another and outside situations, or rather due to the overriding of lower levels by extended consciousness. Thus, simply changing our conscious descriptions of situations and our
place in them, without engaging in the iterative process of reflecting on feeling as a
guide for the appropriateness of explanations is not taken as a reliable method of
changing, particularly given the strength of implicit appraisals, of habitus, in everyday
life.

Of course, Seligman advocates optimism because it appears to be effective. Changing
the way we think about ourselves, our lives and our possibilities does seem to
motivate and make people feel better, at least for a time. Yet, given the point made in
the introduction, that happiness and well-being are more dependent upon subjective
perceptions than objective circumstances, encouraging ourselves to feel better by
altering our explicit appraisals would seem potentially to have the odd effect of
creating distance, or greater discontinuity, between the self and the world. Even
Seligman suggests that we measure our optimism as it is not always realistic.

Optimism may be effective because the change naturally engages the process of
releasing past patterns through the observation of feeling or because we are simply
deceiving ourselves. According to the theory presented in this thesis, we can most
clearly ascertain whether change towards greater harmony has occurred by what
happens, the situations in which we find ourselves. Seligman’s views, and positive
psychology generally, cannot be reconciled with this view; they offer no broader
reason or meaning for events than the natural ups and downs of life, and perhaps
occasionally good and bad luck.

This raises a further crucial point. As discussed in the introduction in relation to the
views of Reiff, the lack of broader meaning is not separable from the lack of inherent
value in the world that characterises the perspective of science and its commitment to
materialism. Thus, the major task of psychology, theoretically, is to make us feel
better; how this is achieved is of little consequence. The possibility that optimism can
at times disconnect us more from situations cannot really matter. The implication runs
through Seligman’s work that we are reasonably free to choose our perspective on
situations, particularly setbacks, the best response to which is to see them as
temporary, specific and external. As also mentioned in the introduction, of these three
parameters of explanatory style, only personalisation refers specifically to the cause of
the situation. The most effective means of improving our lives, then, in terms of how
we understand causes, would be to take full credit for every positive occurrence and
to blame someone or something else for every difficulty. Even though Seligman suggests that we choose our perspective carefully and that we not give up personal responsibility altogether, no real reason can be offered apart from the individual psychological outcome. If the externalisation of the causes of setbacks appears to work, in that we can feel better, then this can actually reinforce the perspective of victimisation, simultaneously strengthening the repetitive, historical pattern and we can expect the situation to repeat. Thus, we might surmise that the strategy of flexible optimism, because it cannot theoretically grasp causal relations and relies on simple cause and effect, is not a reliable method for change. Paradoxically, preserving this mode of understanding causes may in fact increase the likelihood for the repetition of positioning that does not serve a person.

Of course, it is very difficult to analyse the work of Seligman, for instance, given the basis of psychology in the ontological assumptions of science, with reference to the wholly different assumptions of a process ontology and the hierarchical theory of nature presented in this thesis. Positive psychology cannot, by definition, offer a conception of causal relations beyond the linear and mechanistic, and therefore cannot be aligned with the theory presented herein. Even so, it is important to reflect on the claim that optimism, for example, does assist people to change their lives; some phenomena may occur as a result of the practice of positive psychology that it simply cannot describe. In other words, it is not as though redescribing situations in optimistic ways has no effect at all. A redescription at this level must simply be understood in relation to levels above and below, as contributing to an understanding of the whole self in the world. Similarly, linear concepts of cause and effect are not useless; they are often enough for our purposes, particularly in negotiating the physical world. Yet they only describe one kind of relation, which is necessarily removed from a broader context. Placing the idea of altering explicit appraisal in a broader theory of the self in the world, best conceptualised through the double relation and based in a process ontology and the causal principles of inner aspect and outer aspect, can highlight the major point that positive psychology appears to miss, that the way we describe situations both matters and has an effect beyond our individual psychological functioning. Action, usually conceived as physical acting in the physical world is not the only way to have an effect on the world. Rather, our consciousness is the inner aspect of a process that is in causal relation to everything.
else. The way that inner levels harmonise in relation to each other and levels outside the self is relevant not only to ourselves, but to the world, including other people and other creatures. Even though we exist in partial autonomy, in hierarchical relation to processes outside ourselves, we remain deeply connected with everything else that exists in the underlying yet unfathomable wholeness of change.

Blame

It is worth clarifying these causal relationships through a discussion of blame. The directive of optimism, which would encourage us to blame other people or external circumstances for our setbacks, reaches the extreme form of the perspective of victimisation identified in the self-help movement. This limits the description of a situation to the present tense, in a way that cannot account for individual histories or the complexity and depth of causal relationships. At the same time, however, it would be dangerous to say that genuine transgressions do not occur; people do need to be held accountable for their actions and, importantly, given the opportunity to atone for their mistakes. Thus, the contention of this thesis that each individual is always positioned in relation to her unique history as well as a unique present needs to be reconciled with culturally held views of justice and reparation. It is vital to keep in mind that conceptualising individual experience through the concept of feeling as unique, individual metaphors, interpretive and in relation to a history of interactions, does not render situations ‘caused by’ the individual in a simple way; the acceptance that situations cannot be characterised by linear relations of cause and effect works both ways in that the suspension of blame mentioned in relation to the alteration of ontological metaphor refers to all people in a given situation, including the individual from whose perspective the situation is viewed. If someone transgresses me, and I choose to suspend the ascription of blame because I accept that the situation has some causal relationship to myself and my history, this is not the same as blaming myself for whatever has occurred. Furthermore, I may ultimately suspend blame of another person and yet still hold him accountable for his actions. This may be seen as two levels of description of a situation.
Holding people accountable for their actions may be seen as an interpretation in the context of a higher level cultural process. Encouraging certain forms of action, whilst discouraging others, is based on agreed upon norms and rules, generally developed over more than one generation, often, in terms of basic norms, traceable through many cultures over a long period of time. This provides a higher level context for choices made about conduct amongst smaller groups, such as families and amongst individuals, and a higher level mode of resolving disputes.

Order and stability are made possible by such higher level cultural processes and their constraint of human behaviour. Such stability, however, is dependent upon not recognising the uniqueness and complexity of a given situation. Understanding situations, and in particular the actions of human beings in relation to one another, in terms of linear relations of cause and effect is a simplification that allows us to interpret a situation as of a type, to which we can then apply agreed upon norms and rules. As with the general paradox articulated through hierarchy theory, such constraint also provides the possibility for novelty; whilst interpreting situations and actions in this way can never completely characterise them, as any description is in some sense artificial, doing so supports the relatively peaceful cohabitation and cooperation of large numbers of people, which in itself provides new possibilities.

Choosing to suspend blame and enter into the process of releasing patterns from the past described in the previous chapter may be seen as a description at the level of the individual, based on the understanding of the ontological relationship between the inner aspect and outer aspect of a self. When a person chooses to suspend blame and observe and redescribe her own inner change as a result, she changes her positioning in a completely real way; the relation, which has an ontologically equal status with the inner aspect of the self, changes. The effect of this is to alter the positioning of the other person with regard to the particular situation. This alters the higher level process of their relationship, although it must be remembered that the effect on the other person is not direct; the inner aspects of others are their own and their worlds are interpreted accordingly. Nonetheless, the change in an actual relation provides the possibility for any other party involved to experience something different; it can be assumed that others have their own reasons for their own positioning, but the act of inner change by one person, such as releasing blame, creates an entirely novel
situation for others in the creation of a novel relation. Thus, the potential exists for a different experience for anyone involved in a situation; it may be seen as an opportunity for others to notice their own selves in relation in a new way, which may assist them to more clearly observe the way things usually happen in contrast. Importantly, these changes in relation are fundamental in terms of the basic manner by which change might be identified. They do not require that individuals engage with one another, or speak about a situation or relationship. If a person changes his relation to a situation in the process described, the novel relation and new opportunity exists for all others involved whether or not they ever engage with that person again. The change of inner aspect and outer aspect are simultaneous as two discernible sides of the wholeness of change. Attending to the development of the self in an attempt to alter positioning and patterns that engender greater separation from the world reverberates through groups; changing the relation between the self and the world, perceptible at the level of feeling and observable in actual situations literally, in some small yet far-reaching way, changes the world.

These two types of description may be clarified with reference to the discussion of hierarchy theory in Chapter Five. In a straightforward way, the manner in which situations may be understood and people held accountable for their actions has been identified as a higher level description than the way in which an individual might choose to describe and engage with a situation. Yet, these different descriptions are more than simply perspectives from different levels; they are different modes of causally engaging with the world. Recall that the problem of characterising dynamic and structure, emerging clearly in hierarchy theory and approached in biosemiotics was discussed in relation to semi-autonomous selves and in the context of the ontology of process and relation, inner aspect and outer aspect. The result of this discussion was the view of consciousness as the inner aspect of the self, in causal relation with all else as the outer aspect of the self, and the only process that each of us is completely within. The way to most genuinely effect change of the outer aspect, then, is to bring the inner aspect of the self into greater harmony.

Interpreting the actions of individuals from the level of culture certainly has an effect in the world, yet it is a perspective on a process from the outside, an interpretation of relations. Whatever changes come about as a result of such an interpretation are
simply not as far reaching as when an individual chooses to change in the manner described. In a tangible, obvious way, people’s lives may change as a result of, for instance, a crime, a legal process and consequences for each person. Yet if the causal role of each person’s history in the generation of present situations is not considered, by each individual themselves, the positioning remains for each person and situations are likely to repeat.

Even though it is possible to consistently engage both the individual and cultural levels of description the fact remains that the theory presented in this thesis, which supports the suspension of blame at the individual level, and the system of thinking underpinning Western culture are very different. Therefore, we might assume that if we choose to both hold individuals accountable for their actions and to release blame at the individual level, the higher level of culture and the manner in which justice and reparation occur could change quite considerably, although it is difficult to imagine how. At the same time, a simple understanding of cause and effect does tell us something about a situation; as already mentioned, such a view is not completely without merit, but rather, limited. Importantly, some basic ideas about morality seem more related to an underlying human sensibility, feelings that arise by virtue of being in the human form, than particular cultural perspectives. For instance, even if different cultures currently uphold different views of extreme actions such as deliberately taking the life of another, it seems reasonable to assume that doing so always invokes fear and disconnection for those witnessing or involved, and therefore that, as human beings, a human culture cannot exist that both condones such actions and provides for the development and flourishing of all its members. Thus, it is possible to hold people accountable for such actions, preserving the view of human life as inherently unique and valuable, yet still to engage in processes of release at the individual level such as those described.

Interestingly, as a self comes into greater harmony with the world the experience of the self comes into a closer relationship with the present. Past patterns may be genuinely released and the situations that occasion them genuinely do not repeat. Conditions become more optimal for the self, such that a greater range of experience is possible and the self, more open to situations, spends less time resisting whatever is occurring. The effect of this at the level of explicit awareness and appraisal is to make
more accurate descriptions of outer circumstances possible, as this level is less tied to maintaining adequate descriptions in situations of disharmony. If feeling is more closely related to present occurrences and less reliant on implicit memories, supporting more accurate higher level explicit descriptions of the self in relation, then this makes a person more accurate, more rational and more able to reflect on difficult and nuanced ethical and moral questions. Therefore, we might assume that if many people release blame at the individual level, then we are better placed culturally to consider alternatives and make decisions about how we expect each other to behave and how we might both make reparation for mistakes and each become more responsible for our own rehabilitation.

**Empowerment**

As discussed in the Introduction, the obverse of the perspective of victimisation pervading the self help movement is that of empowerment; rather than seeing ourselves as without control this view suggests that we are completely in control of all that occurs around us. Again, this perspective is less extreme in positive psychology and its basis in materialism; if we can view ourselves as the cause of positive events, we are more likely to feel better and to believe ourselves capable, and therefore more likely to act to improve our own lives.

The more extreme forms of this view, such as *The Secret* claim that consciousness is the cause of all the situations in which we find ourselves. Even though there is some suggestion that feeling and thought must be in harmony to effect change of external circumstances, this is not clearly explained. Furthermore, causal explanations are limited to simple linear cause and effect, meaning that the view of reality presented is simply idealist, the opposite of the currently dominant scientific materialism. Thus, even if *The Secret* appears to be aligned with two of the three principles for change, suggesting that both feeling and thought should change, along with external circumstances, the view of cause and effect offered is mechanistic and linear and therefore the ideas espoused in *The Secret* cannot be deemed a reliable method of changing one’s experience. Indeed, if the method is attempted and fails, the
misunderstanding of cause and effect leaves us with little option than to see ourselves as deficient in some way.

**Fulfilment**

It is worth reflecting, even if briefly, on *The Secret*, simply because its rather broad and rapid uptake exists as a cultural phenomenon and in this sense it needs to be taken seriously. Despite some discussion of its principles leading to a more joyous and loving life and more harmonious relationships, the overwhelming focus of the ideas is on the generation of wealth. This, coupled with its limited and idealistic view of causation, renders it another, perhaps more extreme form of individualism than the form that emerged from the materialist scientific world view. It contains the suggestion that we are somehow intimately connected with all else, yet its view of cause and effect cannot describe this. Put simply, the inability to explain causes means that idealist views of human empowerment, extreme forms of positive thinking, can say nothing about how we all contribute to the creation of a better world, only how each of us as individuals can improve our own lives, usually conceived as the generation of wealth.

The theory presented in this thesis does indeed centralise the individual as it claims that the most fundamental way we can effect change in the world is by bringing the self as a whole into greater harmony, which is not separable from greater harmony with the outer aspect, the world as far as the individual can know and experience it. It is assumed that this will genuinely alter individual experience, and increase joy in a person’s life. Yet this is not the same as individualism; each individual’s experience is most important to him or herself because it is his or her own unique process and the deepest causal relation with the world. The way by which the self is known and influenced is also the way by which the world is known and influenced.

Thus, altering our own experience in the manner described in the previous chapter is not separate from altering the world, even if we cannot really know how large or small the effects of individual change are. Change is by definition of the whole. This is the deepest kind of agency, and as the self comes into greater inner harmony,
reminded of patterns by what occurs around her, and releasing them, a person becomes more open to situations and able to engage more in subtle interplay that is the acceptance of and delight in difference. The joy that this engenders is literally the experience of greater connection with the world and other people, and this creates a very genuine relation for other people. We can experience and appreciate not only our own inherent uniqueness, but that of other people and other living processes. The joy that connection brings for an individual in this way may be seen as the encouragement of development that is basic to nature, and it encourages a stance towards the world that is inherently one of increased respect, compassion, kindness, acceptance, love and wonder. Even though tension and separation are also basic to nature and provoke learning and development, they often reach levels detrimental to development, particularly in the later stages of the life cycle. Put simply, the more we accept ourselves and value our own uniqueness, the more we accept and value others. This way of focusing on the individual and understanding the depth of our connection to all else, in a way we can literally observe in our lives, provides the basis for positive community based on fulfilment, but a fulfilment that is both individual and collective. It is neither deprivational nor appetitive, placing complete control neither outside nor inside the individual, but moves beyond both. This allows us to acknowledge human weakness and limitation and the need for higher level constraint, whilst viewing weakness and limitation as also in relation to all else, still valuing each person equally and accepting the magnificent uniqueness of every life, indeed every process.

Summary

The central concern of this thesis has been to describe the generation of human experience and understanding, and how we might create more fulfilling lives for ourselves, individually and, by extension, collectively. This has been explored in detail in relation to the development of nature and consciousness, and individual experience, through repetitive forms of action, feeling and extended consciousness. The focus on the generation of human experience has been largely on the emergence of feeling as the most basic form of consciousness, an inherently causal perception of the self in relation. This theory of feeling and the ontology in which it is based were intended as a complement to Lakoff and Johnson’s theory of metaphor, which deals in
detail with the functioning of extended consciousness, particularly language and its influence on our experience and understanding.

The major and overriding theoretical move that has been attempted is the move beyond the absolute division of subject and object, and this was done most basically at the level of ontology by characterising existence as differentiation, the emergence of process and relation, in dialectical relationship with one another and identifiable in the causal relationship of inner aspect and outer aspect. Making such a move is indeed conceptually difficult, and dialectics was invoked as a manner by which to understand change theoretically, but also by which to engage in theoretical speculation.

Such speculative theory is an ongoing conversation that should be expected to change; all that can ever be offered is provisional and exploratory discussion. At the same time, it is clear that dualistic thinking has reached its limit; the postdualisms of materialism and idealism no longer serve us individually or culturally. Even if an understanding of duality is relevant in some areas, as a basic world view it is no longer helpful. The discussion of process philosophy and outline of a process ontology in Chapters Two and Three has helped to organise and extend the discussion of the theories drawn upon in the chapters following, in an attempt not only to conceptualise human experience and understanding, but also to reinforce the point that a paradigm shift to a process view of the world can develop theories in various disciplines. Even if some theorists do not wish to engage in ontological speculation, basic ontological assumptions of necessity pervade all theorising. Failing to question the currently dominant scientific, materialist worldview and consider alternatives means that even theory that genuinely attempts something new remains limited by the currently available language and metaphors. To some degree, the same may be said of this thesis: no neutral starting point is possible. Explanation is only possible in relation to the already understood, hence the importance of the notion of dialogue. Moving forward seems to require that we accept that we cannot absolutely characterise the world and our place in it.

The dialogue in which this thesis has engaged may be characterised as genuinely interdisciplinary. The focus has not been on solving the particular problems of any given field or the identification of problems within a given process philosophy.
Rather, the goal has been to identify similar ideas and difficulties within a number of different disciplines, highlighting the basic underlying intention of so many theorists of moving beyond absolute distinctions of subject and object, and the potential of process philosophy to do so. Indeed, it has been mentioned a number of times that process philosophy is currently the only approach within the Western philosophical tradition that can manage such a move. Aligning theories with process philosophy and the process ontology outlined in Chapter Three has offered possibilities for developing particular fields by placing them in the context of such an ontology, although, as with altering the ontological metaphor underlying our understanding of our unique and human experience, change at this level reverberates deeply through theories. Nonetheless, it has been assumed that theories underpinned by a reductionist, mechanistic and materialist ontology can offer insight. For instance, LeDoux’ discussion of implicit and explicit appraisal and memory, based in evidence gained through scientific experiment, has complemented and helped organise the discussion of action and feeling. Furthermore, even theorists within the most scientific of disciplines, such as neuroscience, engage in speculation. Damasio’s views may be characterised as speculative, and certainly are of value when assisted by a process ontology and an explicit placement in the context of hierarchy theory, as discussed in Chapter Four. Indeed, a process ontology and a hierarchical theory of natural processes, in particular the engagement of both observation and description of phenomena that is well systematised through a levels approach, helps us to identify more clearly the direction of speculative theories such as Damasio’s, even if we must always contend with the problem of drawing insight from theories conceptualised through the language and metaphors of traditional science.

At the same time, engaging in interdisciplinary discussion has its own limitations, not least that every aspect, thinker and problem within a single field simply cannot be contended with. A great deal of selection occurs. For instance, Nussbaum’s theory of emotion and feeling was chosen, and expanded upon, for its philosophical treatment of emotion and feeling, but also for its ability to engage with psychoanalytic ideas about child development. Yet psychoanalysis is a broad and diverse field in itself, and therefore Nussbaum’s perspective is one way of conceptualising only a number of psychoanalytic views. In this way, her work has similarities to this thesis, in that she draws on a different discipline and places it in a philosophical context. Thus, she can
build a philosophical discussion that draws usefully on psychoanalysis, but is not in itself a thoroughgoing critique of the field.

In a sense, this thesis has attempted to analyse the state of contemporary Western culture with regard to views of the self and individual experience, by both drawing upon and critiquing the tools generated by this culture. The consistent recourse to process philosophy and the specific process ontology outlined offers an attempt to stand outside and systematise these theories, yet always remaining aware of the paradox that is dialectics. Nietzsche is indeed aware that the philosopher may act as a physician of culture, but is always both within and outside of it.522

Limitations

This thesis leaves itself open to the rather obvious criticism that whilst releasing blame in a present situation can release the repetition of positioning, this does not in itself justify the release of blame when something happens for the first time. Much of the establishment of patterns has been attributed to general and recurring positioning, particularly within families and particularly within the early years of life, yet it is still assumed that singular traumatic events can occur. Even if often those events we take to be singular are actually the repetition of positioning in some form, proviso must be made that some of them are not. Two points are worth making with regard to this. Firstly, the release of a pattern that is described by the principles for change described in Chapter Nine releases the whole pattern, in that suspending blame in the present is assumed to release blame relating to the initial situation. Secondly, even if we cannot discover an ultimate reason or cause for a singular event, the choice can always be made to engage in the process of release anyway. In effect, this choice accepts the causal principle of inner aspect and outer aspect with regard to the initial positioning of the self in terms of a basic positioning in space and time, in culture and circumstances within which a self comes to exist at all, and this in turn can only be understood in terms of the unknown, the unfathomable of change. We can understand

something of the creation and development of the self in relation, but cannot explain why a particular self comes to be born in a particular position, historically, culturally and within a given family. Rather than backing away from what may be seen as essentially one of the most fundamental questions of human existence, this may be seen as embracing the mysteriousness of the development of life, but also maintaining the basic principle of differentiation; each one of us being in a process limits what we can know or experience while also making it possible. We cannot, within this theory, discover an ultimate reason that explains why the process begins in the first place, but we can find ways to understand and change from within the process of the self once it has begun.

At this stage it must be assumed that circumstances within which the self develops are largely outside the sphere of influence of the self, particularly at a young age and during the development of both levels of consciousness. Thus, the fact that some children develop through difficult or painful experiences that position them in later life cannot ultimately be explained; this point is really an extension of the more general point that the beginning of a new self in a particular point in space and time is not within the current realm of explanation. Yet, if the most immediate context for development is processes within families then further inquiry into the repetition of positionings across generations could very well provide insight. Indeed, Anne Ancelin Schützenberger provides a great deal of anecdotal evidence, drawn from extensive practice as a psychoanalyst, for the repetition of events within families. She does not presume to explain them, only to note that they occur, the most striking of which, the ‘anniversary syndrome’, describes the repetition of similar or the same events in successive generations at the same age and on the same date. Schützenberger claims to have observed such repetition many times, and focuses her practice on locating repetitious events and relationships within families, through detailing these in the construction of a ‘genosociogram’, essentially providing therapy based on supporting individuals to understand their positioning. Her book *The Ancestor Syndrome*, includes reference to the explicit understanding of extended consciousness:

By constructing his or her own genosociogram, a therapist, trainer or any individual will better understand the history of his or her own family and better understand what could have been passed on from one generation to the next.
Understanding these facts, individuals will be better able to understand their own way of functioning, and can therefore clarify certain aspects of their behaviour.\textsuperscript{523}

She also acknowledges the role of feeling, the release of which may be interpreted as bringing the levels inside and outside the self into greater harmony.

“Transgenerational transmissions” are not spoken about; they are secrets, unspoken, kept quiet – hidden events which are sometimes banned even from thought, sometimes they are unthinkable – and they are passed down from generation to generation without being thought about or assimilated. And then we see traumas, illnesses, somatic manifestations, or psychosomatic manifestations which often disappear when you talk about them, cry, scream or work them out.\textsuperscript{524}

This fits with the contention of this thesis that the patterns below conscious awareness, by which the self is formed, and continues to form in relation, can be altered by redescription at both the level of feeling and extended consciousness. Even though not explicitly stated, Schützenberger’s focus on patterns continuing through families supports the suspension of simple notions of linear cause and effect in the present; the causes of, for instance, events and illnesses that repeat through families, are neither entirely in the present or the past; present occurrences are the re-emergence of already existing patterns in relation.

Thus, it seems at least possible that we might identify and work with the repetition of positioning beyond an individual life, but this does require that we know something of our own family history, which is not always possible. Granted, understanding an event that appears singular to the individual as a repetition across generations might assist in releasing the pattern, as Schützenberger describes. Yet given the semi-autonomy of the self, and the basic causal principles of inner aspect and outer aspect, we can assume that the effect of suspending blame is the same if we view the event as


\textsuperscript{524} Ibid., p 92.
singular, although this approach does require an acceptance of the unknown which is more difficult to grasp than when we can identify some causal principle by way of repetition.

Despite these possibilities, the fact remains that some may indeed view this perspective as belittling towards those born into very difficult circumstances or extreme suffering. Yet the point may yet be made that viewing human life and each individual self as in relation to the whole of existence and the unfathomable of change means that we can always deeply effect change that brings us towards fulfilment and connection. Obviously, this may be seen as more difficult for some than others, and such a point should perhaps be approached with a certain humility before a wholeness and connectedness that is beyond our ultimate human comprehension, but maintaining that we always have a choice offers far more than passivity before a fearful and disconnected life. Furthermore, we might even assume that the more difficult the situation in which blame is released, the greater reverberation through to those involved, and this suggests much greater potential for human life, in terms of openness, connection, discovery, appreciation of uniqueness and acceptance of difference than currently exists. This in turn describes an evolution of human consciousness, towards the kinds of experience we all naturally prefer and that supports the unique development of each person.

Most importantly, this theory can only prove itself in practice. It may offer a way for people already engaging in therapy, particularly the self help or ‘New Age’ practices that have no underlying theory, to better understand their experiences, assisting further change. Others wishing to change their experience and to come to view their own lives as deeply meaningful and connected with all else might choose to follow the principles espoused in some way or find a therapy that may be aligned with them, and in this case only tangible changes in their circumstances can provide some verification of the theory. It is assumed that such verification in practice, experience of what has been discussed, enhances understanding in the fashion of dialectics, proving only that altering descriptions can alter experience in a basic sense of what happens. In this way ‘proof’ is necessarily circular.
As already mentioned, this thesis does not offer a single therapy as such. It offers a view of reality through which to understand therapeutic practices. The principles offered in the final chapter are intended to capture this view and therefore to be considered a guide for the evaluation of therapies. This thesis has not attempted a detailed evaluation of such a range of therapies, which could certainly include those more centred on the body, such as forms of ‘energy healing’, more psychologically oriented counselling-style therapies, as well as meditative practices; this will be detailed work in itself and should be the next step for the application of this work. It is assumed that such detailed analysis could develop and refine the expression of the principles of change offered, but that the basic view of reality, of the creation of human experience and understanding, and the causal relationships involved, should hold. The perspective developed in this thesis is not expected to, on its own, convince anyone of its veracity but to offer a different model for understanding change that can encourage an openness to different kinds of experience, which in turn develops deeper understanding. Indeed, the intention of this thesis beyond the attempt to develop a better theory of experience is that people come into greater connection, with themselves which is also and necessarily with the world and other people, and experience more of the joy that is the natural potential for each unique and inherently valuable human being.
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