

## THE POLITICS OF REASON: TOWARDS A FEMINIST LOGIC

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For efficient subordination, what's wanted is that the structure not only not appear to be a cultural artifact kept in place by human decision or custom, but that it appear natural — that it appear to be a quite direct consequence of the facts about the beast which are beyond the scope of human manipulation or revision. It must seem natural that individuals of the one category are dominated by individuals of the other and that as groups, the one dominates the other. [13, p.34]

### I. The Possibility of a Feminist Logic

From Plato and Aristotle to Kant and beyond, the philosophical tradition of the west has delineated a concept of reason which is exclusive of women and other oppressed groups and is most fully represented by privileged social groups. For Plato, it is those who represent reason (the Guardians) who should rule over the other elements in the state, just as in the individual reason itself should rule over the body and the passions. Aristotle explicitly conceives the social and natural orders in terms of a rational meritocracy in which the rule of men over women, of masters over slaves, of Greek over barbarian, and of humans over animals is justified and naturalised by the supposed possession by the inferiorised side of each of these pairs of a lesser degree of reason [2, *Politics*, Book 1, chs 4-5]. For Kant, it is not only women who are excluded from reason by their possession of a gallantly presented but clearly inferiorised 'beautiful understanding' [36], but also workers [36, p.9], and blacks, the latter being ascribed an inferiority 'as great in regard to mental capacities as in color' [35, p.111]. Modern social conceptions continue to treat reason as naturalising the domination of ruling elites; thus the British colonial governor of Egypt, Lord Cromer, remarks about his Oriental subjects:

The European is a close reasoner; his statements of fact are devoid of any ambiguity; he is a natural logician, albeit he may not have studied logic; he is by nature sceptical and requires proof before he can accept the truth of any proposition; his trained intelligence works like a piece of mechanism. The mind of the Oriental, on the other hand, like his picturesque streets, is eminently wanting in symmetry. His reasoning is of the most slipshod description. Although the ancient Arabs acquired in a somewhat higher degree the science of dialectics, their descendants are singularly deficient in the logical faculty. They are often incapable of drawing the most obvious conclusion from any simple premises of which they admit the truth. Endeavour to elicit a plain statement of facts from any ordinary Egyptian. His explanation will generally be lengthy and wanting in

lucidity. He will probably contradict himself half-a-dozen times before he has finished his story. He will often break down under the mildest process of cross-examination. (Quoted in [68, p.38])

It would be naïve indeed to assume that these conceptions of ruling reason are merely ‘abuses’ of a basically neutral concept, ideas about reason which have no impact on the construction of reason itself, but have been entirely accidental and extraneous to it. It has been the task of feminist philosophers particularly to show how the historical construction of reason as masculine has structured its dominant forms not only in an exclusive and oppositional relation to women, but to the characteristics and areas of life they have been taken to represent, such as emotionality, bodiliness, animality and particularity [48; 46; 5; 25; 27]. Other feminist philosophers have shown how conceptions of women and other oppressed groups as outside reason and as associated with the emotions, the body and animality are reflected in the dominant accounts of scientific objectivity and rationality [12; 5; 37; 26; 27; 23]. The formal discipline of logic has been seen as the highest expression of reason; it is the form of reason whose practice has excluded and marginalised women to an even greater extent than science and philosophy [54]. Although logic is usually assumed to be a paradigm of neutrality, the work of feminist philosophers has suggested that even logic has been shaped by these relations of domination [34; 28; 54; 61], a claim I will help to support here. Most feminist critics of reason have not argued for its complete rejection. Indeed many have explicitly argued against this strategy, and nearly all have opted for alternative development, the reconstruction or reworking of reason in less problematic and oppositional forms, as well as for a limitation of its role and a reduction of its traditional pretensions to constitute the ruling element in human identity and social relations [60; 61]. It is only in the case of logic that feminist analyses [71; 54] have advocated complete rejection and abandonment, of formal and informal logic alike, as a sphere of unlimited abstraction and contest for mastery of the other [71, p.199].

My argument in this paper supports the contrary view that, as in the case of other areas of reason, feminists and others concerned to develop conceptual structures which can be tools of liberation need not abandon the field of logic entirely, and advocates the more moderate strategy of reworking, including critical scrutiny of dominant forms combined with awareness and development of alternatives based on engaged reason. As a preliminary to developing this argument, I shall examine more closely the basis for Nye’s view that there can be no reform of logic, that logic can have no liberatory uses for feminists [54, pp.175, 179] and is best expunged from human knowledge systems. Nye’s condemnation of logic, which extends not only to the study of logic (both formal and informal) but to the disambiguation of concepts and the whole idea of logical fallacies, is part of the aggressive contemporary movement of the literary paradigm against other disciplines, especially philosophy. Thus Nye’s concluding proposal for the development of a vaguely specified discipline of ‘reading’ as an alternative to close philosophical reasoning [54, p.183] appears to involve the elimination of much of what is distinctive about philosophy and its reduction to some form of literary studies. Nye’s principal charges against

logic are threefold:

1. The development of logic as a tool of social hierarchy and exclusion.
2. The abstract character of logic, the disengagement of the syllogism and the creation by logicians of artificial forms of language, which presuppose and create 'relations between speakers which are alien to feminist aims' [54, p.179].
3. The attempt to replace language by a unitary authority, its normative and 'silencing' role in relation to other forms of speech, and its association with reductive programs such as logical positivism.

I shall consider these in turn.

Our understanding of the social context and construction of reason has been immeasurably advanced by the work of feminist scholars such as Lloyd and Nye. Nye's important book *Words of Power* contributes many insights about the social framework in which the classical concepts of reason and logic have developed. As Nye shows, in this context 'the rationality of those who are natural rulers is continually defined in opposition to other unacceptable speech: the emotional expressions of women, the subrational words of slaves, the primitive political views of barbarians, the tainted opinions of anyone who does manual labour' [54, p.50]. However, most of these oppressive social relations attributed by Nye exclusively to logic, especially in the ancient context, can with greater justice be attributed to the broader concept of reason itself; the term 'reason' would be the usual translation of many of the passages lauding logic Nye cites. It is ruling reason, and not just or even primarily logic, which is conceived in terms of opposition to a lower conceptual, material and social order. Thus 'the refusal of the physical world of generation and change' [54, p.180], the desire for permanence and purity, is at least equally that of classical philosophy and classical conceptions of reason. It often seems as if Nye's use of the term 'logic' over the alternative 'reason' has an arbitrary component, and that 'logic' is the term used for whatever is held to be objectionable in reason. But if the historical context of oppressive social relations which has also affected reason, does not entail abandoning, as opposed to reconstructing, reason (as Nye herself suggests in her conclusion it does not), why does it make a case for abandoning logic, as opposed to critically reconstructing it and making much more limited claims for it?

The answer must lie in the additional features of logic, its abstractness as well as its normative role. Both Nye and Walkerdine [71, p.199] see logic as a sphere of unlimited abstraction and contest for mastery of the other. For Nye and Walkerdine, these features are inseparable from logic, so that logic can only coopt feminists: according to Nye 'the feminist logician speaks from a script in which the master always wins' [54, p.180]. Nye makes the case against abstraction in strong terms, objecting to the social relations of disengagement and separation from experience she believes to be involved in any abstract or artificial language: 'Desperate, lonely, cut off from the human community which in many cases has ceased to exist, under the sentence of violent death, wracked by desires for intimacy they do not know how to fulfil, at the same time tormented by the presence of women, men turn to logic' [54, p.175] — a more suitable description, one might think, for the average alcoholic than the average logician. Certainly abstraction *can* be a retreat: the over-

riding value and role accorded abstraction and reason in classical philosophy reflects the devaluation of the sphere of the household, the domain of women, slaves and animals in an elite, male-dominated culture. But an analysis which makes an invariant claim of this kind about abstraction and then extends it to the motivation of each individual logician is both over-individualised and over-generalised. Although feminist world-views have stressed the particular in contrast to the abstract [15; 16; 17] and feminists are, I believe, right to critique the dangers and high pretensions of abstraction and the inferiorisation of particularity in philosophical traditions, can we really insist that *all* uses of language be grounded in personal experience, the testimony of the witness, and ‘the normality of human interchange that logic refuses’ [54, p.176]? Who, I begin to ask at this stage, is silencing whom? The area of intellectual activity potentially destroyed by such a program to eliminate abstraction and anything which departs from ‘normal’ language begins to look alarmingly large — not only mathematics (which can be derived from logic and involves a similar level of abstraction) and large areas of science, but ‘computer programming, statistics, economic models . . .’ [54, p.181] and no doubt a great deal more we might not want to lose.<sup>1</sup> Such total rejection of abstraction would involve a program highly restrictive of thought.

A counterargument might be made that the inferiorisation of the sphere of particularity and personal experience does not arise from the operations of abstraction and universalisation in themselves, but from a particular set of philosophical and social doctrines *about* abstraction and universalisation that those engaged in these operations can be encouraged to reject. If this is so, the rejection of abstract disciplines is unnecessary and does not address the real issues. The assumption that feminism can afford to jettison logical theories implicitly assumes that there is no problematic politics (other than the general politics attributed to logic and abstraction itself) involved in dominant logical theory and structures. If this hidden assumption of the political neutrality and unity of logic is incorrect, the most likely result of the suppression of critical logical discussion would be the implicit use of dominant accounts without critical examination. The failure to address the area could then leave significant and influential sources of domination uncriticised and untheorised, and inhibit the development of alternative modes of thought. The most important objection to Nye’s preoccupation with abstraction then is that it is a diversion, that while we are thus focussed upon its supposed evils, the really damaging structures of thought the legacy of ruling reason has handed down to us — especially, as I will show below, those of instrumental and colonising forms of rationality which dominate much modern thought in political and economic areas — get away unrecognised and unchallenged. These forms of rationality, which are both broader and narrower than logic and are not closely tied to abstraction, often seem to be the real target of Nye’s attack on logic (e.g. [54, p.181]), but they are nowhere clearly identified in the text. In identifying them, as I shall also show below, some forms of logic can be of assistance.

<sup>1</sup> The notion of abandoning the abstraction of logical theory faces the same problems as that of abandoning reason and scientific theory, discussed in [26].

## II. Social Selection and the Diversity of Logic

The remaining part of the case against the possibility of a liberatory logic rests on the supposed claims of logic to authority over language, to the role of universal law, to be the monolithic core of language, and on the normative and silencing role it is alleged to play in relation to speakers and forms of speech judged less adequate. But are these really features of all possible forms of logic, or are they rather results of particular, perhaps dominant, conceptions of the role of logic? Certainly it is possible to do logic and to strongly reject the doctrines and aims of reductive philosophical programs such as logical positivism which Nye treats as the culmination of logical thought: logical positivism as a program involving logic bears approximately the same relation to logic as scientism does to science, and is actively in conflict with certain kinds of logic, such as modal and intensional logic. There are modern logicians who see logic as playing the role of follower rather than leader in relation to natural language, who reject the idea of logic as providing universal 'laws of thought' [55], and who would see both logic and reason as playing a much more limited role than that ascribed to them in rationalist traditions of thought.

But it is the enormous diversity of modern logic, perhaps its most striking feature in comparison with the logic of the past, which does most to refute Nye's claims about the totalitarian politics inherent in logic and its inevitably normative and 'silencing' role. If there is not one Logic, but in fact many different logics, if logics can be constructed which can tolerate even contradiction itself [63], logic itself can have no silencing role and no unitary authority over language. Nye's account itself *constructs* logic as a monolithic unity, not only by stopping the historical discussion at Frege<sup>2</sup> and ignoring the plurality of logics which is the most revolutionary feature of modern treatments, but by suppressing the existence of logical dissent and multiplicity in her account of the logical discussion of both the present and the past.<sup>3</sup> Thus the great debate around the issue of implication which has raged not only in contemporary logic but around the interpretation of the ideas of Boethius, Zeno and Abelard [69; 65] does not rate a mention in her account of their work, or of logic generally. In these parts of her historical account, Nye follows the establishment histories of [64; 41; 47], histories which create an illusion of unity out a reality of diversity by reading the dominant contemporary accounts of implication back into the past [69] and discounting dissent in the present. But as in other areas of knowledge there are competing and contested accounts of reason, and correspondingly of logical systems. Given the actual diversity of logics, a key question in any political critique of logic is how and why this diversity has been obscured, but we cannot confront this crucial question within the framework of an indiscriminate rejection of logic.

Part of the answer to this key question, as I suggest below, lies in a set of social selection processes operating to favour dominant forms of logic, processes which

<sup>2</sup> Concluding the account with Frege makes it possible to ignore not only the plurality of modern logics but also the existence of important socially progressive logicians such as John Stuart Mill and and Bertrand Russell.

<sup>3</sup> For detailed references to the extensive literature involved in this debate, especially around the issue of implicational logic, see [66; 63; 65].

reveal clearly the 'fingerprints of the social' (in Sandra Harding's telling phrase) in logic and which give the lie to the widespread idea that logic occupies a pure realm beyond social engagement. The construction of logic as a monolith, in which undiscriminating types of feminist critique collude, is precisely what has permitted formal logical systems and principles to be considered value free and to escape serious social criticism or examination. In the context of the modern plurality of logics, a blanket rejection of logic on account of its abstraction and singularity removes the basis for any useful feminist critique, beyond these very problematic and general grounds of abstraction and singularity themselves. Once the plurality of logical systems has been acknowledged, feminist and other social critique can be more discriminating in its response to logics, and begin an exploration of the way in which different logical systems correspond to different forms of rationality. We can begin to understand systems of logic and their corresponding systems of rationality as *selected*, in much the same way that scientific theories are selected. I shall show that an understanding of the way selection has operated to privilege certain of these forms of rationality has much to contribute to an understanding of the deep roots of phallogentrism and other oppressive conceptual structures in western thought, and that we can find in the selection of logical systems the same marks of elite perspectives which have been widely demonstrated elsewhere for supposedly neutral and universal forms of knowledge. These influences are to be found especially in the privileging and presentation as 'intuitive' or 'normal' of certain accounts of negation, especially the negation of classical logic.

The plurality of logics has made it possible for symbolic logic to provide and investigate not one but very many accounts of negation, of which certain ones (normally that negation which is derived from the system of classical logic) are selected by influential logical theorists as corresponding to what they take to be the standard, natural and normal negation of ordinary speech and thought. But accounts of negation can be seen as providing, at a very abstract level, certain structures and principles for conceiving and treating otherness [34], the other which is not self, whatever self may be. Once this natural and obvious interpretation of negation is made, the illusion of the timelessness and political neutrality of logic vanishes, for as I shall show, even abstract accounts of otherness are far from being philosophically and politically neutral. The relationship of systems of logic to social structures may instead be seen as similar to the relationship of technology and of scientific theories to these structures. Many recent theorists have helped expose the social influences and social relations in the selection of technology and of scientific theories [42; 44; 22; 23; 24; 26; 37; 45; 51; 76; 77]. Many mechanisms have been identified which can help account for the social construction of theory and the effect of social relations in technology selection. One basic mechanism involves a form of reciprocal selection in which those theories and technologies are selected from an adequate group which accord with and help to naturalise certain dominant social structures. These selected theories in turn help to fix, extend and perpetuate social relations of domination [77].

The appearance of singularity and the dominance of classical logic may thus represent the results of theory selection and construction to validate, reflect and theoret-

ically express certain worldviews implying principles of relationship to the other. I shall show that perspectives naturalising an account of the other in terms of dualism and domination have had a great deal to do with which principles and accounts of negation have been viewed as 'normal', 'intuitive', and worthy of investigation and teaching, and which have been viewed as 'deviant' and of formal or specialist interest only. I shall suggest that the structure of negation given by classical propositional logic — the dominant formal logical theory of our time — in particular has been privileged and selected over rivals on account of features which also make it appropriate to describe it as a logic of domination, features giving an account of the other in dualistic terms which naturalise their subordination. If theories of negation and of otherness are seen as linked to forms of rationality, this critique of dominant logics can be seen as extending and supporting the feminist and post-modernist critique of the phallocentrism of dominant forms of rationality [30; 46; 26].

An understanding of these areas can also extend and clarify feminist options for the deconstruction of dualised identity. In the account below I try to establish some of the abstract logical characteristics and principles of dualism, the structure of a general way of thinking about the other which expresses the perspective of a dominator or master identity, and thus might be called a logic of domination. This structure of thought is not just applicable to the domination of women, but applies to various groups of subordinated others. Feminism has had a good deal to say about the phallocentrism of western thought, the way in which dominant conceptions of reason have excluded and denied dependency on the feminine and feminine-associated spheres of the body, nature, emotionality, reproduction, materiality and subsistence. But a broader concept than phallocentrism is needed because many of the key areas of exclusion are associated not only with women but with other subordinated groups such as slaves, the colonised, and with subordinated economic classes. Thus the exclusions of reason as conceived in the dominant traditions of western thought express not a male but a master identity, and the ideology of the domination of nature by reason has been common to various forms of oppression. Women's oppression is not the only form of oppression to be reflected in this formation of reason, and feminist theorists have been joined by philosophers concerned with the black experience, racism and colonialism in theorising the principles for conceiving the other which arise from dualism.

### III. Dualism, Difference and Otherness

Both postmodernist philosophy and feminist philosophy have given a key role in their accounts of western philosophy to the concept of binary opposition or dualism, the construction of a devalued and sharply demarcated sphere of otherness [67; 19; 18; 34; 9; 20; 31, p.96; 30; 6; 70; 57; 58; 60; 21; 73; 74; 38; 39; 40; 28]. Many feminists have pointed to the role of western concepts of reason in excluding and inferiorising the dualised contrast class of the feminine, nature, the emotions and various areas of human life counted as 'irrational'. The consideration of dualism and otherness in current concepts of reason has an important bearing on the feminist project of reconstructing reason in less oppositional ways. Accounts of the

relation between self and other in terms of mutuality rather than in terms of dualism and domination have a key role in feminist ethics, political theory and feminist psychology. However, this key concept for feminist thought stands in need of further investigation and clarification. A dualism, I argue, should be understood as a particular way of dividing the world which results from a certain kind of denied dependency on a subordinated other. This relationship of denied dependency determines a certain kind of logical structure, as one in which the denial and the relation of domination/subordination shapes the identity of both the relata. I use examples from a number of forms of oppression, especially gender, race and class, to show what this structure is, and discuss its logical formulation.

Dualism can be seen as an alienated form of differentiation, in which power construes and constructs difference in terms of an inferior and alien realm. In random tyrannies, beings may be selected for oppression in arbitrary and random ways. But in systematised forms of power, power is normally institutionalised and 'naturalised' by placing cultural constructions on existing forms of difference. Dualisms naturalise systems of domination and appropriation, and are their major cultural expressions and justifications.<sup>4</sup> Western thought and society has been characterised by a set of interrelated and mutually reinforcing dualisms which permeate culture, forming a fault line which runs through its entire conceptual system. Each of them has crucial connections to other elements, and has a common structure with other members of the set. The interrelationship of the elements of the structure means that the cultural meaning and characteristics of each of the elements of contrasting pairs is determined not in isolation but at least in part by the other members of the set. They should be seen as forming a system, an interlocking structure.

Key elements in the dualistic structure in western thought are the contrasting pairs of culture/nature, reason/nature, male/female, mind/body, master/slave, reason/matter (physicality), rationality/animality, reason/emotion, mind (spirit)/nature, freedom/necessity, universal/particular, human/nature (non-human), civilised/primitive (nature), production/reproduction (nature), public/private, subject/object, self/other. I do not claim completeness for this list. Indeed, this is impossible, since any distinction can in principle be treated as having the structure which characterises a dualism. But these dualisms are key ones for western thought. The leading dualisms reflect the major forms of oppression in western culture. Thus the dualisms of male/female, mental/manual (mind/body), civilised/primitive, human/nature correspond directly to and naturalise gender, class, race and nature oppressions respectively, although a number of others are indirectly involved. Their development has been an historical process, following a historical sequence of evolution which is culturally specific. Thus dualisms such as reason/nature may be ancient, but others such as human/nature and subject/object are associated especially with modern, post-enlightenment western consciousness. But even the ancient forms do not necessarily fade away because their original context has changed, but are often preserved in our conceptual framework as residues, layers of sediment

<sup>4</sup> On the importance of not locating explanation just in ideological systems see [78, pp.36-62]. On the false, dualistic choice posed by accounts which insist on either material or ideological primacy see [39].



deposited by past oppressions. Culture thus accumulates a store of such conceptual weapons, which can be mined, refined and redeployed for new uses. So old oppressions stored as dualisms facilitate and break the path for new.

Dualisms are not universal features of human thought, but conceptual responses to and foundations for social domination. An account of their development would also be an account of the development of institutionalised power, and for prehistory would necessarily be speculative. Consider Maria Mies' historical hypothesis concerning the origins of domination, according to which male hunting bands evolve into proto-military forces, living first off women's work as agricultural and subsistence labourers and then acquiring slaves from other tribes not thus militarily organised in a positive feedback process of accumulation [52, pp.64-65]. Such a process might give rise initially to such dualisms as sacred/profane (where male or chiefly power is religiously sanctioned), male/female and master/slave. Later stages of the accumulation process would see the development of new forms, often produced as nuances, new inflexions of older forms. Thus the period of colonial conquest in the west from the Fourteenth Century onwards brings to the fore civilised/primitive as a variant of reason/nature and of reason/animal and mind/body, and the rise of science brings to the fore subject/object dualism [5].

The exclusions of reason, as the principal concept representative of ruling elites in this process of forming dualisms, are thus multiple and not reducible to the exclusion of women. Nevertheless gender plays a key role, since gender ideals especially involve ideals of reason [46; 62], and women have often been the symbolic bearers of a wider class of exclusions. The supposedly universal ideals of reason invoke not only a male identity but the elite male identity of the master. Thus to read down the first side of the list of dualisms is to read a list of qualities traditionally appropriated to men and to the human, while the second side presents qualities traditionally excluded from male ideals and associated with women, the sex defined by exclusion, 'made from the dross and refuse of a man' [53, p.121]. Women have been constructed and marginalised as nature, as body, as physicality, as animality [53, p.187, 191].<sup>5</sup> Women have represented nature and emotion in contrast to male spirit or reason [53, p.166; 46], and primitiveness in contrast to male civilisation [Freud in 53, p.80]. Women have represented particularity in contrast to male universality [Hegel in 53, p.62], and necessity in contrast to male freedom [Aquinas in 53, p.183]. The gendered nature of the contrasts emerges explicitly in Pythagoras' early set of contrasts, and in his comment 'There is a good principle, which has created order, light and man; and a bad principle, which has created chaos, darkness, and woman' [53, p.50; 46, p.25]. Despite changes in the conception of nature as a

<sup>5</sup> 'Woman is a violent and uncontrolled animal' — Cato (quoted in [53, p.193]); 'A woman is but an animal and an animal not of the highest order' — Burke [53, p.187]; 'I cannot conceive of you to be human creatures, but a sort of species hardly a degree above a monkey' — Swift [53, p.191]; 'Howe'er man rules in science and in art. The sphere of women's glories is the heart' — Moore [53, p.166]; 'Women represent the interests of the family and sexual life; the work of civilisation has become more and more men's business' — Freud [53, p.80]; 'Women are certainly capable of learning, but they are not made for the the higher forms of science, such as philosophy and certain types of creative activity; these require a universal ingredient' — Hegel [53, p.62]; 'A necessary object, woman, who is needed to preserve the species or to provide food and drink' — Aquinas [53, p.183].

sphere of exclusion and the associations of femaleness over time [50], the linkage between women and nature as the sphere of exclusion from reason has been strongly and persistently made in western frameworks. Nature can be thought of as a sphere of multiple exclusions of various areas of difference marginalised as other.

The structure of reason/nature dualism and its variants is the perspective of power; it represents, as Nancy Hartsock notes, 'a way of looking at the world characteristic of the dominant, white, male Eurocentric ruling class, a way of dividing up the world that puts an omnipotent subject at the centre and constructs marginal Others as sets of negative qualities' [28, p.161]. This perspective constructs these others by exclusion (or some degree of departure from the centre) as some form of nature in contrast to the subject, the master, who claims for himself the 'norm' of full humanity and reason. The west's understanding of the key concepts through which it deals with the world, its understanding not only of reason and nature but of their specific dualistic forms, has been formed from such contrasts and exclusions.<sup>6</sup> I will now show how this has affected concepts of otherness, starting thought, as Harding [27] recommends, from women's lives.

#### IV. Dualism and the Logic of Domination

There are a number of important characteristics of the relationship between members of contrasting pairs which make it appropriate to call it a dualism rather than just a distinction or a dichotomy. The critique of dualism in culture mounted by feminists is a powerful one. But its force has been considerably weakened by the

<sup>6</sup> Those dualisms (such as particular/universal or public/private) which cannot immediately be seen as variants of a gendered reason/nature contrast can have their derivation from or connection to this basic form revealed by making explicit further implicit assumptions which are used to connect them. These pairs are connected then by a series of *linking postulates*, and when so connected form a web. Linking postulates are assumptions normally made or implicit in the cultural background which create equivalences or mapping between the pairs. For example, the postulate that all and only humans possess culture maps the culture/nature pair onto the human/nature pair; the postulate that the sphere of reason is masculine maps the reason/body pair onto the masculine/feminine pair, and the assumption that the sphere of the human coincides with that of intellect or mentality maps the mind/body pair onto the human/nature pair, and, via transitivity, the human/nature pair onto the masculine/feminine pair. In the case of public/private, the linking postulate connects the sphere of the public with reason via the qualities of freedom, universality and rationality which are supposedly constitutive of masculinity and the public sphere, and connects that of the private with nature via the qualities of dailiness, necessity, particularity and emotionality supposedly exemplified in and constitutive of the feminine and the private sphere [46, pp.74-85]. The civilised/primitive contrast maps all of the human/animal, mind/body, reason/nature, freedom/necessity and subject/object contrasts.

The fact that different philosophers and different periods of philosophy have focussed on different pairs of these dualisms and have defended different linking postulates has obscured the pervasiveness of dualistic and rationalist influence in philosophy. Thus Hegel and Rousseau emphasise the postulates linking public/private, male/female, universal/particular, and reason/nature [46, pp.80-85 and pp.58-63]. For Plato the emphasis is mainly on reason/body, reason/emotion, universal/particular; for Descartes it is on mind/body (physicality), subject/object, human/nature and human/animal; for Marx it is on freedom/necessity, culture (history)/nature, civilised/primitive, mental/manual (a variant on mind/body), and production/reproduction. But a philosopher's explicit focus on particular dualisms is often deceptive, for the gendered character of the dualisms for example may lurk in the background in unexamined and concealed form, as much feminist philosophy exposing phallogocentrism has shown.

vagueness and ambiguity of the concept of dualism and the presentation of dualism in ways which construe it as an all but inevitable feature of thought.<sup>7</sup> The term 'dualism' is often used in ways which do not distinguish it from dichotomy.<sup>8</sup> But if we mean by 'dichotomy' what is commonly meant, simply making a division or drawing a distinction, it is essential to distinguish between dualism and dichotomy. Equating them would either cripple all thought (if we were forced to abandon dichotomy along with dualism) or collapse the concept of dualism (if we were forced to retain dualism along with dichotomy). In either case escape from dualism becomes impossible. Both in terms of predicate logic and in terms of propositional logic, a dualism must be seen as a quite special kind of distinction or dichotomy, one involving particular features which result from domination. It is not just the fact that there is dichotomy, that distinctions are made between two kinds of things which is the key element in establishing a dualistic relation — indeed it is hard to imagine how anyone could get along without making at least some of the distinctions in the list of dualisms — it is rather the way the distinctions have been treated, the further assumptions made about them and the relationship imposed upon the relations which make the relationships in question dualistic ones. Thus by no means every dichotomy results in a dualism. In contrast, dualistic negations involve many further assumptions importing a special hierarchical structure to negation. Dualism should not be confused with dichotomy and seen as creating difference where none

<sup>7</sup> Thus de Beauvoir adds to her account of 'the Other' the claim that 'the category of the *Other* is as primordial as consciousness itself', treating the dualistic construal of otherness she goes on to outline as inevitable.

<sup>8</sup> Dualism and dichotomy are not clearly separated in many discussions, for example the discussion of Jay [34] or that of Hartsock [28], and the terms 'dualism' and 'dichotomy' are used in the literature in manifold, unclear and ambiguous ways. Some writers seem to use the term 'dichotomy' to indicate the structure I have characterised as 'dualism', and dualism to mean 'dichotomy' (see, for example, Warren's distinction between dualism and hierarchical dualism [73]). I do not claim to reflect faithfully an ordinary or settled usage, and my proposal is essentially a recommendation or reform proposal aimed at clarifying the area. However, even if the terminology is variable, the distinction between the special structure of non-identity which constitutes a dualism and non-identity or distinction as such needs to be marked in some clear way. The problem with the use of the term 'dichotomy' to mark the special structure I have characterised is that 'dichotomy' already has a fairly settled meaning as division or distinction and hence facilitates confusion. The failure to mark the distinction has the disastrous result that all attempt to draw distinctions or to use negation comes under suspicion. In the case of Jay [34] however, a substantive rather than a terminological thesis is involved which convicts any distinction, based on the Law of Excluded Middle, of dualism, and proposes an alternative Aristotelian logical structure which abandons it. I offer a different analysis here of dualism which does not associate it with Excluded Middle. In terms of predicate logic I take dualism and radical exclusion to involve a maximisation of non-shared characteristics, whereas the establishment of ordinary Leibnizian difference or non-identity requires only that a single characteristic be different. In terms of propositional logic, the dichotomising functions of negations which simply divide the universe and recognise a boundary between self and other without importing a hierarchical structure are associated with the Law of Non-Contradiction ( $\sim(A \& \sim A)$ ) and the Law of Excluded Middle ( $A \vee \sim A$ ).

The Platonic and classical arguments using what Nye calls 'logical division' [54, p.30] and which she convicts of hierarchical thinking, involve much more than these principles, adding dualistic principles which systematically select one of the pair of disjuncts over the other and enable elimination. Their form could be better interpreted as that of the Disjunctive Syllogism were it not that in the Platonic arguments the disjuncts are usually not exhaustive. That is, most of the Platonic arguments are not formally valid, as Aristotle recognised.

exists. Rather it capitalises on existing patterns of difference, rendering these in ways which ground hierarchy. The point is important for several later conclusions. As I shall show, the way to escape this structure is to replace dualistic negations with others expressing a non-hierarchical concept of difference which does not import dualistic structures into thinking about the other.

A dualism then is more than a relation of dichotomy, difference or non-identity, and more than a simple hierarchical relationship. In dualistic construction, as in hierarchy, the qualities, (actual or supposed), the culture, the values and the areas of life associated with the dualised other are systematically and pervasively construed and depicted as inferior. Hierarchies however can be seen as open to change, as contingent and shifting. But once the process of domination forms culture and constructs identity, the inferiorised group (unless it can marshal cultural resources for resistance) must internalise this inferiorisation in its identity and collude in this low valuation, honouring the values of the centre, which form the dominant social values. A dualism is an intense, established and developed cultural expression of such a hierarchical relationship, constructing central cultural concepts and identities so as to make equality and mutuality literally unthinkable. Dualism is a relation of separation and domination inscribed and naturalised in culture and characterised by radical exclusion, distancing and opposition between orders construed as systematically higher and lower, as inferior and superior, ruler and ruled, centre and periphery. It treats the division as part of the natures of beings construed as not merely different but as belonging to radically different orders or kinds, and hence as not open to change. The following family of features is characteristic of dualism.

#### 1. Backgrounding:

This is a complex feature which results from the irresolvable conflicts the relationship of domination creates for the master, for he attempts both to make use of the other, to organise, rely on and benefit from the other's services, and to deny the dependency which this creates. The master usually denies dependency through making the other inessential, denying the importance of the other's contribution or even his or her reality, and through mechanisms of focus and attention. One way to do this is to insist on a strong hierarchy of activities, so that the denied areas are simply not 'worth' noticing. A related way to solve this problem is through treating the other as the background to his foreground. Marilyn Frye explains the essential features and tensions of this dynamic of denial:

Women's existence is both absolutely necessary to and irresolvably problematic for the dominant reality and those committed to it, for our existence is presupposed by phallocratic reality, but it is not and cannot be encompassed by or countenanced by that reality. Women's existence is a background against which phallocratic reality is a foreground . . . I imagine phallocratic reality to be the space and figures and motion which constitute the foreground, and the constant repetitive uneventful activities of women to constitute and maintain the background against which this foreground plays. It is essential to the maintenance of the foreground reality that nothing within it refer in any way to anything in the back-

ground, and yet it depends absolutely upon the existence of the background. [14, p.167]

The view of the other as inessential is the perspective of the master subject. The master's view is set up as universal, and it is part of the mechanism of backgrounding that it never occurs to him that there might be other perspectives from which he is background. Yet this inessentialness he believes the slave to have in relation to his own essentialness is an illusion. First, the master requires the other in order to define his own boundaries and identity, since these are defined against the other (see feature 4 below); it is the slave who makes the master a master, the colonised who make the coloniser, the periphery which makes the centre. Second, the master also requires the other materially, in order to survive, for the relation of complementation has made the master dependent on the slave for fulfilment of his needs. But this dependency is also hated and feared by the master, for it subtly challenges his dominance, and is denied in a variety of subtle and direct ways, with all the consequences of repression. The real role and contribution of the other is never recognised, the material order of which the slave is the representative is devalued or pronounced inessential, the economic relation is denied, mystified or presented in paternalistic terms [49, p.21; 72]

## 2. Radical Exclusion (Hyperseparation):

Because the other is to be treated as not merely different but as inferior, part of a lower, different order of being, differentiation from it demands not merely distinctness but radical exclusion, not merely separation but hyperseparation. Radical exclusion is a key indicator of dualism.

The relation of radical exclusion is a non-identity with special characteristics. For distinctness, for non-identity or otherness, there need be only a single characteristic which is different, possessed by the one but not the other, in order to guarantee distinctness according to the usual treatment of identity (e.g. in Leibniz's Law.) Where items are constructed or construed according to dualistic relationship however, the master tries to magnify, to emphasise, and to maximise the number and importance of differences and to eliminate or treat as inessential shared qualities, and hence to achieve maximum separation. 'I am nothing at all like this inferior other' is the motto associated with radical exclusion. Denial of or minimisation of continuity is important in eliminating identification and sympathy between members of the dominating class and the dominated, and in eliminating possible confusion between powerful and powerless. It also helps to establish discontinuous orders and separate 'natures' which explain and justify widely differing privileges and fates. A major aim of dualistic construction is polarisation, to maximise distance or separation between the dualised spheres and to prevent them being seen as continuous or contiguous. Separation may be established by denying or minimising overlap qualities and activities. Conceptual structures stressing polarisation allow the erection of rigid barriers to contact which protect and isolate dominant groups.<sup>9</sup>

<sup>9</sup> As Jay [34] notes, certain ethnologists have seen this radical exclusion relation as important in religious thought in the distinction between things sacred and things profane, and have also noted (although usually not with disapproval) one of its functions, namely, to mark out, protect

Thus dualistic construal of difference usually treats it as providing not merely a difference of degree within a sphere of overall similarity, but as providing a major difference in kind, even a bifurcation or division in reality between utterly different orders of things. Dualism denies continuity, treating its pairs as comprising 'two worlds between which there is nothing in common', worlds between which there is a 'vacuum' [34; 10, p.39]. Dualistic distinction aims to maximise the number, scope or significance of distinguishing characteristics and to disappear bridging characteristics. It does not do this in a random way, but usually by classifying characteristics as belonging exclusively, as far as possible, to one side or the other, thus setting up sets of complementary qualities formed through exclusion and denial of overlap. Thus the master claims for himself reason, contemplation and higher pursuits, and disdains the slave's merely manual occupations, while the slave is forced to exclude from his or her makeup the characteristics of the master, to eschew intellect and become submissive and lacking in initiative. These very qualities then confirm the slave's different nature and fate, for she or he is 'a slave by nature'.

The polarising treatment of gender characteristics in western culture provides a good model of such dualistic construal, and of how common or bridging characteristics are ignored, discouraged or actually eliminated by such conceptual/social construction. The division of gender characteristics as rigid complements eliminating overlap which is commonly noted by feminists [31, p.316] illustrates such polarisation. Thus men are defined as active, intellectual, egoistic, competitive, and dominant, while women are defined as possessing the complementary qualities, as passive, intuitive, altruistic, nurturant and submissive. Because of radical exclusion, one member of a dualistic pair, that construed as superior, defines itself against or in opposition to the other, by exclusion of the latter's inferiorised characteristics. This leads to dualistically construed pairs being constructed as complementary, in that each has characteristics which exclude but logically require a corresponding and complementary set in the other. But because of the polarisation and elimination of overlap such pairs normally present a false dichotomy, and in a different context it becomes possible to conceive the items distinguished in less oppositional terms.

Albert Memmi shows how similar distancing is used in colonisation to create the image of separate, discontinuous natures and orders of being. Radical exclusion requires unbridgeable separation establishing different orders of being. It requires a separation not open to change, in extreme cases rendering continuity or proximity even unimaginable.

The colonialist stresses those things which keep him separate, rather than emphasising that which might contribute to the foundation of a joint community. In

<sup>9</sup> *continued...*

and isolate a privileged group. Thus Emile Durkheim writes: "Sacred things are those which the interdictions *protect and isolate*; profane things those to which these interdictions are applied and which must remain *at a distance* from the first." [10, pp.40-41, emphasis added]. Profane things are thought of as threatening to sacred things, and the power they represent. Such a dualism of sacred and profane often occurs in the context of a powerful priesthood or religious ruler, or uses religious symbolism to protect the power of one group and intimidate and repress another.

those differences, the colonised is always degraded and the colonialist finds justification for rejecting his subjects. But perhaps the most important thing is that once the behavioural feature, or historical or geographical factor which characterises the colonialist and contrasts him with the colonised, has been isolated, this gap must be kept from being filled. The colonialist removes the factor from history, time and therefore possible evolution. What is actually a sociological point comes to be labelled as being biological or, preferably, metaphysical. It is attached to the colonised's basic nature. Immediately the colonial relationship between the colonised and coloniser, founded on the essential outlook of the two protagonists, becomes a definitive category. It is what it is because they are what they are, and neither one nor the other will ever change. [49, pp.71-72]

Such construction naturalises domination, making it appear to be part of the nature of each and in the nature of things, and yields two hyperseparated orders of being. 'Thus,' concludes Memmi [49, p.75] 'due to a double reconstruction of the colonised and himself, he is able both to justify and reassure himself'.<sup>10</sup>

### 3. Relational Definition (Incorporation):

A further important set of features of dualistically construed opposites discussed especially by a number of feminist writers is that the master defines himself by exclusion, against the other, and that the underside of a dualistically conceived pair is defined in relation to the upperside as a lack, a negativity. Simone de Beauvoir writes that 'humanity is male and man defines woman not in herself but as relative to him; she is not regarded as an autonomous being . . . she is defined and differentiated with reference to man and not he with reference to her; she is the incidental, the inessential as opposed to the essential. He is the Subject, he is the Absolute — she is the Other' [8, p.8]. As Luce Irigaray notes, in phallogocentric construals of otherness woman has not been considered as occupying a space on her own account, but as enclosing a space for another [29, p.3].

Although each side of a dualistic pair is dependent on the other for identity and organisation of material life this relation is not one of equal, mutual or symmetrical relational definition. The master's power is reflected in the fact that his qualities are taken as primary, and as defining social value, while those of the slave are defined

<sup>10</sup> Radical exclusion and other dualistic features appear in many aspects of relations between economic classes. Hyperseparation appears especially in the division of labour in production, which is often framed in terms of a rigid mind/body dualism in which mind people control body people. For example many tasks of decision-making and various other intellectual tasks which can beneficially be amalgamated with the practical or manual aspect of work are reserved for managers, with the purpose of setting them apart as a distanced and controlling elite. In culture radical exclusion appears in the division between high and low culture, as well as in cultural concepts and practices such as 'quality' and conspicuous consumption which are designed to mark out higher classes by exclusion. Denials of dependency appear in many areas, especially in the foregrounding of the managerial or entrepreneurial contribution to the task and appropriation of the product, and in private property relations in the backgrounding of the social infrastructure and other social contributions which go to make entrepreneurial appropriation possible. For a discussion of some of the contemporary phenomena of class see [11, pp.135-143]. 5. On the comparable mechanism of denial of dependency on the part of the colonizer see [49, pp.54-55 and pp.66-67].

or constrained in relation to them, as negations or lacks of the virtues of the centre [28, p.161]. As Memmi writes, 'The mechanism of this remolding of the colonised . . . consists, in the first place, in a series of negations. The colonised is not this, is not that . . . He is never considered in a positive light; or if he is, the quality which is conceded is the result of a psychological or ethical failing' [49, pp.83-84]. Because the other is defined and perceived in relation to the centre, he or she is not encountered fully as an independent other, and the qualities attributed or perceived are those which reflect the centre's desires, needs and lacks. Thus the role of the 'noble savage' is to be a foil: he or she is seen as possessing all the good qualities thought to be missing in 'civilisation', when this is regarded negatively, and as lacking all the social virtues when it is regarded positively. Since qualities or activities which do not fit into the scheme are ignored or denied, an other so perceived cannot provide resistance or boundary for the self. Relational definition of identity has two important corollaries, instrumentalism and homogenisation.

#### 4. Instrumentalism (Objectification):

Although the relationship is usually (as in Aristotle's case) presented as being in the interests of the dominated as well as the dominator, it is apparent that those on the lower side of the dualisms are obliged to put aside their own interests for those of the master or centre, that they are conceived of as his instruments, a means to his ends. They are made part of a network of purposes which are defined in terms of or harnessed to the master's purposes and needs. The lower side is also objectified, treated as one without ends of its own which demand consideration on their own account, and defined as part of the sphere of the master's ends.

Since the relationship is seen as that of a superior to a separate inferior order, it is seen as fitting and natural that the lower side serves the upper as a means to his ends. The upperside is an end in itself, but the underside has no such intrinsic value, is not for-itself but merely useful, a resource. The identity of the underside is constructed instrumentally, and the canons of virtue for a good wife, a good colonised, or a good worker are written in terms of usefulness to the centre. In the typical case this involves setting up a moral dualism, where the underside is not part of the sphere to be considered morally, but is either judged by a separate instrumental standard (as in the sexual double standard) or is seen as outside morality altogether, part of the realm of the 'natural and expedient', of usefulness to the centre.

#### 5. Homogenisation (Stereotyping):

More than polarisation is needed for the relationship to be an appropriate one for domination. The dominated class must appear suitably homogeneous if it is to be able to conform to and confirm its 'nature'. In homogenisation, differences among the inferiorised group are disregarded [28, pp.160-161]. I well remember, as an Australian teenager of English-speaking background in the post-war years, homogenisation as part of the contempt with which non-English 'foreign' immigrants were treated. Their differences denied, they were all dismissed as 'aliens', 'wogs' or 'reffos' (refugees); the multiplicity and dignity of their cultures and languages ignored, they were seen as 'just jabbering away', much like animals. Why



couldn't they speak English, a proper language, like us? And white Australians, like colonists everywhere, continue to ignore the multiplicity and diversity of indigenous culture and social organisation. This disregard for or denial of the diversity of Aboriginal nations has inspired the forced congregation of Aboriginal people from different tribes together which has been a major mechanism of oppression, loss of identity and disruption of Aboriginal culture.

Homogenisation supports both instrumentalism, relational definition and radical exclusion. As Hartsock [28] points out, homogenisation is a feature of the master perspective. To the master subject, residing at what he takes to be the centre, differences among those of lesser status at the periphery are of no interest or importance on their own account, and can be ignored unless they are relevant to his ends and desires; all the rest are just that, 'the rest', the Others, background to his achievements and resources for his needs. They are conceived and defined in relation to him, to his desire, which is what matters. Diversity and multiplicity which are surplus to his desires need not be acknowledged. The other is not seen as a unique individual bound to the self by specific ties, and is related to as a universal rather than as a particular, as a member of a class of interchangeable items which can be used as resources to satisfy the master's needs. Elimination of reliance on any particular individual of the relevant kind also facilitates denial of dependency and backgrounding. Instrumentalisation and commodification normally produce relations of this kind. Thus the claim 'If you've seen one redwood, you've seen them all'.

Homogenisation in gender stereotyping is well-known, involving the appeal to homogeneous and eternal male and female 'natures'. The sage (e.g. Lucretius) and the popular maxim both appeal to the 'eternal feminine' and assert that 'women are all alike'. The place of homogenisation in the pattern of domination as a supplement to discontinuity is insightfully discussed by Marilyn Frye: to the extent that the demand for the dualism of just two sharply differentiated sexes is a social creation unsupported by any natural order (since sharp sexual dimorphism does not exist in newborn humans or elsewhere in nature) it requires constant vigilance and regimentation, the coercion of individuals in more or less subtle ways in order to maintain it. Radical exclusion and homogenisation combine to naturalise domination:

To make [domination] seem natural, it will help if it seems to all concerned that members of the two groups are very different from each other, and this appearance is enhanced if it can be made to appear that within each group, the members are very like one another. In other words, the appearance of the naturalness of the dominance of men and the subordination of women is supported by anything which supports the appearance that men are very like other men and very unlike women, and that women are very like other women and very unlike men. [13, p.34]

Homogenisation as a feature of the colonial relationship is remarked upon by Memmi: the colonised are all alike, and are not considered in personal terms or as individuals. 'The colonised is never characterised in an individual manner; he is

entitled only to drown in an anonymous collectivity' [49, p.25]. Orientals, as Said remarks, are seen by Westerners as almost everywhere nearly the same [68, p.38]. Thus homogenisation supports both instrumentalisation and radical exclusion of the colonised. The colonised is reduced to a function, and the relationship of domination destroys the ability to perceive or appreciate characteristics of the other over and above those which serve this function. As Marilyn Frye argues, such dualistic structure becomes a matter not just of conception but also of construction, affecting the very constitution of identity and the construction of bodies. 'Persons . . . with the power to do so actually construct a world in which men are men and women are women and there is nothing in between and nothing ambiguous; they do it by chemically and/or surgically altering people whose bodies are indeterminate or ambiguous with respect to sex' [13, p.25].

### V. Classical Logic as the Logic of Domination

Dualism then imposes a conceptual framework which polarises and splits apart into two orders of being what can be conceptualised and treated in more integrated and unified ways. These features of dualism provide a basis for various kinds of centredness, the rendering of the world in terms of the views and interests of the upper-side, the centre. The master perspectives expressed in dualistic forms of rationality are systematically distorted in ways which make them unable to recognise the other, to acknowledge dependency on the contribution of the other, who is constructed as part of a lower order alien to the centre. These forms of rationality are unable to acknowledge the other as one who is essential and unique, non-interchangeable and non-replaceable. The other cannot be recognised as an independent centre of needs and ends, and therefore as a centre of resistance and limitation which is not infinitely manipulable. This provides the cultural grounding for an ideological structure which justifies many different forms of oppression, including male-centredness, Euro-centredness, ethno-centredness, human-centredness, and many more.

This way of being constructed as other, which is shared by a number of marginalised groups, clearly has a formal logical pattern and corresponds to certain representations of otherness in formal logical theory. I shall argue that it corresponds closely to features of classical logic, but not to the principles of logic *per se*.<sup>11</sup> Logic offers alternative and contested accounts of concepts such as reason and otherness. Selection from among these accounts is made in accordance with the principles of theory selection used in other areas, and is influenced by the same sorts of social relations. Choices for the most part reflect the perspectives of those at the centre, and theories which sit comfortably with this perspective are more likely to be successful than those which do not. Despite its notorious problems as an account of reasoning practice (irrelevance and the paradoxes of implication), classical logic is firmly entrenched as the Logic and still manages to get away with representing as

<sup>11</sup> The discussion in Hartsoc [28, pp.162-163] makes many of the important connections between the features of dualism and the perspective of power which I have amplified here, but seems to carry the implication that a dualistic account of otherness is an inherent feature of Logic.

'deviant' more implicationaly adequate rivals such as relevant logic.<sup>12</sup> Thus Quine and others have vigorously defended classical logic as the logic of 'our ordinary' negation. There is, in Quine's view, no alternative to it, for any alternative would, in his revealing phrase, 'change the subject' [64, p.81]. One reason for the entrenched character of classical logic, I shall argue, may be that 'the subject' of classical logic is the master. At the level of propositional logic, classical logic is the closest approximation to the dualistic structure I have outlined.<sup>13</sup> The 'naturalness' of classical logic is the 'naturalness' of domination, of concepts of otherness framed in terms of the perspective of the master.

As work in relevant and paraconsistent logic [66] has shown, negation is the key axis of comparison among implicational systems. If negation is interpreted as otherness, then how negation is treated in a system, together with other features of the system, provides an account of how otherness is conceived in that system.<sup>14</sup> Classical logic provides an account of otherness which has key features of dualistic otherness. The negation of classical logic is a specific concept of negation which forces us to consider otherness in terms of a single universe consisting of everything. In classical logic, negation, ( $\sim p$ ), is interpreted as the universe without  $p$ , everything in the universe other than what  $p$  covers, as represented in the usual Venn diagram representing  $p$  as a figure surrounded by a square which represents the universe, with  $\sim p$  as the difference. Such an account leads directly to the relevance paradoxes. But what is important for the issue we are considering here is that  $\sim p$  can then not be independently or positively identified, but is entirely dependent on  $p$  for its specification. Not- $p$  has no independent role, but is introduced as merely alien to the primary notion  $p$  [56, p.217].

This corresponds to the relational definition feature of dualism, to a logic of presence and absence in which the other is specified as the absence of the condition specified by  $p$ , rather than as an independent other. Such an account of  $\sim p$  specifies  $\sim p$  in relation to  $p$  conceived as the controlling centre, and so is  $p$ -centred. The very features of simplicity which have helped to select classical logic over its rivals are implicated here. In the phallic drama of this  $p$ -centred account, there is really only one actor,  $p$ , and  $\sim p$  is merely its receptacle. In the representation of the Venn diagram,  $p$  penetrates a passive, undifferentiated universal other which is specified as a lack, which offers no resistance, and whose behaviour it controls completely. There is no room here for the complexities of the 'dance of interaction' [4, p.27] between the one and an independent other. These features also lead to the homogenisation of the other, since the other of  $p$ , as receptacle, is indistinguishable from the rest of the universe [56]. Homogenisation involves binarism, interpreting the other as 'the rest'. These homogenising properties of classical negation are associated with the

<sup>12</sup> See especially [66].

<sup>13</sup> My argument in this paragraph draws especially on [56].

<sup>14</sup> Nancy Jay [34, pp.39-56] notes this feature in her discussion of dichotomy. However, Jay's discussion is problematic not only because of the failure to distinguish between dualism and dichotomy, but because of the attempt to theorise the area exclusively in terms of an Aristotelian logic which limits options and is a relatively insensitive tool for dealing with both negation and identity, the two central concepts for giving an account of dualism, difference and otherness.

failure of classical logic to make any finer discriminations in propositional identity than truth-functionality. These are precisely the features which help to make classical logic problematic as an account of reasoning practice.

The negation of classical logic, (which is responsible for its paradoxical character), has features of radical exclusion of the alien other which lie behind distancing and discontinuity, as well as exhibiting other features which are characteristic of dualism. The radical exclusion aspects of classical otherness are evident in the classical treatment of contradictions as implying everything, for the effect of  $p \& \sim p \rightarrow q$  is to keep  $p$  and its other or negation at a maximum distance, so that they can never be brought together (even in thought), on pain of the maximum penalty a logical system can provide, system collapse. It is the penalty of merger, of the loss of all boundaries, which threatens when  $p$  and its receptacle,  $\sim p$ , come together in the forbidden encounter of contradiction. Semantically,  $p$  and  $\sim p$  are treated classically as maximally distant in situational space. The extreme penalty classical logic provides for conjoining  $p$  and 'its' other not- $p$ , establishes a maximally strong relation of exclusion between  $p$  and  $\sim p$ , in comparison to other systems of propositional logic which define much weaker exclusion relationships.

A further feature of classical logic which corresponds to the logic of dualism is its role as a truth-suppression implication, which permits the suppression of true premisses. (Simply, in the Aristotelean notion of suppression, a suppressed premise is an assumption used in arriving at the conclusion but not shown as among the premisses.<sup>15</sup>) The suppression of premisses on condition of their truth gives formal expression to the dualistic condition of backgrounding, in which the contribution of the other to the outcome is relied upon but denied or ignored.<sup>16</sup> If the major task of logic is about showing (showing everything that has been relied on), a logic allowing truth suppression is about hiding. Truth-suppression is closely related to another feature of classical logic, truth interchangeability, in which any truth can be substituted for any other truth while preserving implicational properties. It is also closely related to the feature that material equivalence as a criterion of propositional identity yields just one true and one false proposition. This interchangeability of truths can be alternatively viewed as indicating that material implication expresses instrumental or means-ends reasoning, in which conditions as means are interchangeable provided they equally produce equivalent effects or ends. The logic of dualism thus connects with the logic of instrumental reason, which is also expressive of the master identity, and is the dominant logic of the market and the public sphere [62].

## VI. Non-Hierarchical Concepts of Difference

I am not of course arguing that classical logic itself is the cause of women's oppression, and that if we just change the logical theory, all will be well. Challenging dualistic otherness at the level of formal logical theory is only part of what needs to be done to problematise the naturalness of domination, and this conceptual and cul-

<sup>15</sup> For an account of suppression in terms of propositional logic, see [66, pp.139-152].

<sup>16</sup> Backgrounding as truth suppression is most clearly expressed in the principle (related to Exportation),  $p \& ((p \& q) \rightarrow r) \rightarrow q \rightarrow r$ , which accordingly might be called Exploitation.

tural challenge in turn is only part of a wider strategy for change. There are also quite specific strategies, both conceptual/cultural and social/material, which need to be adopted to overcome the forms of oppression this dualistic conception of otherness naturalises and the forms of oppressed identity which this dualistic conception of otherness constructs. The general structural features of dualism expressed in dualistic otherness are shared by diverse groups whose specific forms of oppression are also diverse, but whose general form of identity has been constructed in terms of the canons of dualistic otherness as subordinated to a central master identity. (I have argued elsewhere that the construction of the human/nature relationship in the west has been shaped by this same structure of dualistic otherness [60; 61].) Examining this conceptual structure helps to clarify a general structure of identity that many oppressed groups have in common and to explain some of the steps oppressed groups take to overcome dualised identity. The transition however is not straightforward, and residues of dualism are often remarkably persistent. Dismantling a dualism based on difference requires the reconstruction of relationship, concepts of otherness and identity in terms of an appropriate non-hierarchical concept of difference. Such a relationship of non-hierarchical difference can be used to counter dualistic construction through the following specific features:

1: Backgrounding:

A non-hierarchical concept of difference requires a move to systems of thought, accounting, perception, decision-making which recognise the contribution of what has been backgrounded, and which acknowledge the denied relationships of dependency.

2: Radical Exclusion:

A non-hierarchical concept of difference will affirm continuity (for example common humanity), reconceive *relata* in more integrated ways, and reclaim the denied area of overlap.

3: Relational Identity:

A non-hierarchical concept of difference must review the identities of both underside and upperside. It can aim to critically affirm the difference of the oppressed, to rediscover their language and story, and to reclaim positive independent sources of identity.

4: Instrumentalism:

A non-hierarchical concept of difference implies recognising the other as a centre of needs, value and striving on its own account, a being whose ends and needs are independent of the centre and to be respected in their own right.

5. Homogenisation:

A non-hierarchical concept of difference involves recognising the different concerns and diversity of the 'other nations' which have been homogenised and marginalised in their constitution as excluded other, as 'the rest'.

It is some confirmation of the kind of account given here that these strategies do

correspond to the central conceptual and cultural concerns of various liberation movements. Thus to set out clearly what is involved in dualism is already to have seen the signposts which point the ways towards escaping it. But the escape routes are mazes containing mirrors, traps, sidetracks, looped trails and reversals. The two most common problems in reclaiming dualised identity are the denial of difference and the reversal syndrome.

The temptation to denial of difference sometimes comes from a partial understanding of the role of the role of dualism and radical exclusion in creating exaggerated distancing and hyperseparation between dualised orders. Failure to distinguish dualism and dichotomy particularly can suggest that the resolution of a dualism requires merger, or the elimination of all distinction and difference between these orders. This can result in the attempt to eliminate distinction between mind and body (via physicalism for example), between masculine and feminine (via androgyny), between sex and gender<sup>17</sup>, between humans and nature, and between self and other, and similarly for other pairs in the list of dualisms. But in general such a merger strategy is neither necessary nor desirable, because while dualism distorts difference and makes it the vehicle for hierarchy, it usually does so on the basis of already existing difference. And, as we have seen, the attempt to eliminate distinction along with dualism is misconceived.

The temptation to reversal can result from the attempt to treat dualism as a simple hierarchy, and to reverse value without attending to its identity forming and centre-creating functions. Reversal maintains what Jessica Benjamin [4, p.48] calls the 'dual unity' and complementarity of the dominator/dominated pair, switching roles or reconceiving the underside as a new centre. Reversal is a major conceptual problem for liberation movements. Thus one form of feminist reaction to devaluation has been the attempt to affirm a traditional identity for women without thoroughly reconceiving its dualistic construction. In feminist reversal, a new positively valued feminine identity comes to be specified in reaction to the old by exclusion of rationality and the qualities claimed for the masculine, thus conceding the male claim to these qualities, and indiscriminately affirming the feminine qualities or character acquired in subordination. But although some affirmation is called for, remedying the systematic inferiorisation of the underside of a dualism calls for critical affirmation of what has been devalued and critical reclamation of the qualities and aspects of culture associated with it [33]. Albert Memmi shows how the same dynamic of reversal of values appears for the colonised in his or her attempt at escape. The colonized now affirms his or her own culture's qualities as indiscriminately as the colonizer has despised them.

Suddenly, exactly to the reverse of the colonialist accusation, the colonised, his culture, his country, everything that belongs to him, everything he represents,

<sup>17</sup> For a critique of the treatment of gender in the dualistic terms found in 'sex-role stereotyping' see [14]; for a further critique of its treatment as indistinguishable from sex see [59] and [32]. Gender has often been understood as pure culture, as if the body was irrelevant. But the alternative is not to treat it as indistinguishable from either nature (sex) or from culture. The distinction may still be useful and viable if treated in non-dualistic ways, and can be used to provide some sensitivity to social and cultural context, rather than used to treat gender as reducible to culture.

become perfectly positive elements . . . We shall ultimately find ourselves before a countermythology. The negative myth thrust on him by the colonizer is succeeded by a positive myth about himself suggested by the colonized, just as there would seem to be a positive myth of the proletariat opposed to a negative one. To hear the colonized and often his friends, everything is good, everything must be retained among his customs and traditions, his actions and plans; even the anachronous or disorderly, the immoral or mistaken . . . The colonized's self assertion, born out of a protest, continues to define itself in relation to it. In the midst of revolt, the colonized continues to think, feel and live against, and therefore in relation to the colonizer and colonisation. [49, p.139]

Because the new identity is specified in reaction to the colonizer and still in relation to him, and has accepted the dualistic construction of identity, the appearance that the colonized has broken free of dualised identity is an illusion. The colonised who remains at this stage is tied by reaction to his or her original problematic of identity. An appreciation of this point has led postmodernists to the conclusion that the only escape route from binary oppositions is the dissolution of identity, despite the numerous problems for political expression and action this creates [1]. The analysis I have presented points instead toward another solution, the critical reconstruction of dualised identity [61].

## VII. Towards a Liberatory Logic of Difference

None of the features of dualistic otherness or classical negation is an inevitable feature of logic, negation, otherness, or reasoning. Fully worked out logical systems which do not have these features are available and in use, and these can point in directions which might be promising for alternative conceptions of otherness and rationality. Some of these alternative systems, those of relevant logic for example, can also claim to be a more adequate expression of actual reasoning practice than classical logic [66]. At the same time, the negation of relevant logic, relevant negation, can be interpreted as expressing a notion of otherness as non-hierarchical difference. The resulting concept of relevant otherness avoids radical exclusion, for the conjunction of  $A$  and  $\sim A$  does not induce system collapse. Thus  $\sim A$  is not homogenised as simply part of 'the rest', for an account of propositional identity based on relevant implicational equivalence can make fine discriminations among the elements of the propositional universe. Relevant negation considers exclusion not with respect to the universe, but with respect to a much more restricted state, so that the negation of  $A$  is not just to be specified in relation to  $A$ , but can be introduced as a relatively independent principle. The resulting concept of otherness can be modelled by a number of natural widely used otherness relations, such as 'the other side', which lack hierarchical features [56, pp.216-220]. It is neither a cancellation of nor a lack or absence of a specified condition, but another and further condition — a difference — yielding the concept of an other which is not just specified negatively but is independently characterised and with an independent role on its own behalf.

These systems point toward alternative ways to think of otherness as non-hierarchical difference. In these alternative forms of rationality, which we might call the logic of mutuality [3; 4], the other can be conceived as one who is an independent centre or self, who imposes constraints or limits on the initial centre or self. In the logic of mutuality, relationship between self and other can be mutual, interactive and a centred, rather than falling into the colonising patterns of incorporation or elimination. Another so conceived is no mere reflection of self's needs and desires, nor is it merely a complementary appendage defined by elimination against the universe as a lack of the centre's qualities. In the logic of domination, the instrumentalisation of the other and the conception of the other as a resource defined in relation to the centre is suggested by the weak replacement conditions which allow the other to be substituted for by anything else provided merely that it has equivalent truth value (as one conceived as a resource can be replaced by anything which equally meets the needs of the centre). In these alternative systems, much stronger substitution principles allow the independence and uniqueness of the other to be recognised to a much greater degree. These forms of rationality thus challenge assumptions central to the logic of domination.

Logic is a prismatic glass that has the power to eliminate detail and particularity. This glass can, if we are not careful, cut us off from the world of life, but it can also enable certain general patterns to be better seen. Gazing into the prismatic glass can give us a candid glimpse of the master subject whose lineaments are usually lost in the flux of particularity, but the glass can also show us other more attractive forms and patterns of mutuality. For feminists and others to abandon selective engagement with logic would be to mount a very incomplete challenge to hierarchical thinking and oppressive forms of rationality, which, as I have shown, find their base less in the abstraction of logical thought itself than in the content of reigning logical theories and ruling structures of reason. It seems that a more complete feminist strategy would involve challenging these oppressive forms of rationality and working for their replacement. A strategy for changing conceptions of difference cannot of course just be one of investigating and teaching different logical systems: it must primarily involve changing the practices associated with the oppressive forms of rationality built into key social and political structures, institutions and forms of knowledge. But the critical consideration of logical theory and the development of alternative accounts of rationality, otherness and difference does have something to contribute to many areas of radical and feminist thought, and to the development of a world which truly 'changes the subject' so that modes of reasoning which treat the other in terms of domination can no longer pass without question as normal and natural.



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