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MODERNITY AND HYBRIDS: AN EXAMINATION OF
BRUNO LATOUR'S *WE HAVE NEVER BEEN MODERN*

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This paper centers around Bruno Latour's text entitled *We Have Never Been Modern*. In his text, Latour looks at the Modern relationship between the opposing intellectual processes of purification--dichotomy of Nature and Culture-- and translation--hybrids and networks of meaning. Latour's purpose is to determine contemporary intellectual thought with this 'modern constitution' or methodology of theorizing. This paper looks at three sets of concerns (expressed by David Bloor, Mark Elam and myself) brought about by Latour's theory, all of which claim that Latour, in his attempt to escape from Modernity, remains a Modern thinker. Bloor states Latour is not successful in describing the co-production of nature and culture into hybrids while Elam believes that Latour's theory has social ramifications which Latour does not address. Bloor and Elam's critiques of Latour fail. I posit potential ties to Marxist thought which seem to locate Latour as a Modern thinker.

Modernity and Hybrids:
An examination of Bruno Latour's
We Have Never Been Modern

In his text *We Have Never Been Modern*, Latour's project is to, first, describe what he sees as the 'constitution' of the modern period and, second, to show how contemporary culture does not in actuality hold such a constitution. Latour's hope is that he can show that modernity as it is conceived in the 'modern constitution' is rapidly falling apart at the end of the 20th century due to an internal contradiction and that the time of the non-moderns is rapidly approaching. This is a position which he posits as the next rational direction for theorists to move towards. According to Latour the non-modernists will lift off the blinders that modernity has placed upon the world and people will be able to see the co-production of nature/culture, science/society, and human/non-human. It is Latour's goal to turn upside down his reader's perception of the "how's" and "why's" of the modern world, leaving it in a state of irreparable confusion while holding up in its place a new way to view the world that does not hold the misconceptions of the modern perspective. In essence, Latour claims that western, European thought has, contrary to popular belief, never been modern since it has never fully accepted the modern constitution.

This paper will look at how well Latour achieves his goals of leaving behind modernity. In order to do so I shall first lay out, in section one, the framework that Latour uses to show the fall of modernity. Having described how Latour views the state

of the modern world, I will then address, in sections two through four, three different critiques of Latour's project. All three of these critiques claim that Latour is not setting aside modernity at all, but in one way or another, is either actually shoring up the modern position or, at the very least, that is dependant on the modern world he claims to be overthrowing.

In section two I will look at the work of David Bloor. While Bloor's main goal in his article, *Anti-Latour*, is to show how Latour is incorrect in the assessment and critique of the work of those who follow the Strong Program, Bloor offers an intriguing account of Latour's description of the co-production of nature and culture. It is Bloor's view that Latour does not achieve his goal of theorizing the simultaneous co-production as shown by hybrids, but instead re-inscribes the notion of the pre-existence of nature and culture as categorically separate, the position which it is Latour's goal to undermine.

In section three, I shall look at the critique given by Mark Elam in his article *Living Dangerously with Bruno Latour in a Hybrid World*. This article shows how Latour may not only be mistakenly re-inscribing a position of modernity which he is trying to deconstruct, but is instead shoring up a political position inherent in modernity with his use of hybrids. Elam's position is that instead of the existence of hybrids being the downfall of modern society, they are instead evidence of the repositioning of the modern condition to better secure the distance created by the Great Divide which separates humans from non-humans and the western modern world from the non-western pre-modern world. By using hybrids in the traditional manner Latour is rearticulating the connections between coloniality and science thereby doing the same work as the moderns do, even if he considers this work to be non-modern.

Finally, in section four, I shall look at two issues which, apart for the work of those mentioned above, I believe are problematic for Latour's position. The first of which is the use of historicity as evidence of the claims which he is proposing. This use of historicity is a method which is used by many modern theorists, those he would like to overthrow with his notion of non-modernity. The second problem I identify is concerning the apparent use of a Marxist notion contradiction in Latour's description of the failing of modernity. By laying out the similarities in the basic framework of both Marx and Latour, I will show that Latour is using the same methodology as Marx, a theorist who Latour claims to be opposed to.

The World According to Latour

According to Latour, modern theory making, especially the theory making that goes on in the hard and social sciences, adheres to what he calls the 'Constitution of Modernity'. This constitution, exemplified by the scientific and political work of both Hobbes and Boyle, states that there must be at work, simultaneously, a process of purification and a process of translation. During the process of purification, theorists "free" their theories from the hybridization of natural mechanisms and the interests and passions of humans. By separating the realm of humans, i.e. culture, from the realm of non-humans, i.e. nature, theorists, in their role as knowledge producers, create a divide by positing themselves as viewers untainted by political motivations, having no interests in any system that they are analyzing other than the truth derived from it. The knowledge which is then produced is also conceived of as distanced from the contingency of human

culture. Instead 'natural' objects are considered to be outside of the realm of human construction, distanced from human desires.

But at the same time the modern constitution further empowers the modern theorist by doing the exact opposite of purifying knowledge by mingling or translating the social and the natural to produce hybrid objects. In order to perform the process of translation, the theorist must try to show that the laws of nature which are given should be treated as though they are not opposed to society, as is done in works of purification, but that the laws of nature guide and control society as well. In other words there can be no omniscient human that is wholly removed from the situation the human is studying. One can then begin to understand the difference between what a truly scientific theory or component of a theory looks like as opposed to just some ideology. A truly scientific theory is one that has the ability to transcend the desires and prejudices of both nature and culture.

So the paradox inherent in the modern constitution is based upon the modern creation of hybrids which are a mixture of nature and culture and the simultaneous separation between these two spheres.¹ Both of these processes are needed in order to assure that any given modern theory has the characteristics of transcendence without giving up a position of immanence. Indeed, the modern constitution gives its followers two guarantees by which the value of the constitution can be measured. By looking at the need for transcendence and immanence and the guarantees granted by each, one can begin to see the strength and the problem inherent in the 'modern constitution' from its inception. As Latour describes it:

¹ Latour, Bruno *We Have Never Been Modern* Harvard University Press 1993: 30

Nature [is guaranteed] its transcendent dimension by making it distinct from the fabric of Society- thus contrary to the continuous connection between the natural order and the social order...Society [is guaranteed] its immanent dimension by rendering citizens totally free to reconstruct it artificially-- as opposed to the continuous connection between the social order and the natural order that kept the pre-moderns from being able to modify the one without modifying the other.²

Modern theorists like Boyle and Hobbes were instrumental to this construction of the modern constitution, each by positing seemingly contrary claims about transcendence and immanence. From Boyle the 'modern constitution' gains strength by proclaiming the transcendence of Nature. Men do not create Nature. Instead Nature is to be conceived of as eternal and *a priori*. Knowledge is gained by disciplined scientific spokespersons discovering the secrets which Nature has hidden. This is important because it is necessary for theories to pass as truth not merely because of some political power that some theorists might possess. The knowledge presented by the theorists must not be held up only by those who created it. Truth is gained by claiming the transcendence of nature. The non-humanity of nature is then the first guarantee offered by the Modern Constitution.

But from a political theory perspective it would be unacceptable for nature to be something totally foreign to humans. Its transcendence becomes the quality of Nature which renders it inaccessible³. For Hobbes, unlike Boyle, society is considered to have some sort of immanence over nature. Humans are guaranteed to the ones who are creating society and control their own destiny. Without the claim that humans can create

² Latour, 1993: 139

³ Latour, 1993: 30

their own future to some degree human existence is reduced to simply a manifestation of the laws of nature. If political interactions are guided by laws of nature, there would be no need to theorize possible political systems which might be 'better' since deviation from such laws would be impossible. Instead of politics being ruled over by nature, the world is such that human's create their own political sphere. This creation may be guided by the 'type' of being which humans are, but humans do move from this starting point and build systems of government according to human desire.⁴

So the modern constitution is a methodology in which one is able to define a certain type of question and answer to the question as a valid one by balancing the transcendence of Nature and the immanence of Society. A truly modern theorist is one who would be able to navigate between these two opposing viewpoints in order to defend or attack opposing theorists. For instance, if an opposing theorist were to say that God, through creationism, created the world and all the beings that inhabit it, a modern theorist would be able to say, by appealing to the process of purification, something like "that is very interesting but what my theory tries to do is look how animals have changed by just looking at the natural world itself without the aid of a social institution like religion". In the modern view religion would be seen as another institution and since scientists are looking for the truth of the matter, and since truth can only be derived from the hidden secrets of Nature, appealing to religion would be a faulty methodology for knowledge production. Science, unlike the multitudes of various religious interpretations of the

⁴ For instance, Hobbes believed that it was 'human nature' for the lives of humans to be brutish and short. But it is by human choice that humans decide to overcome this starting point by entering into a social contract. This contract is not a manifestation of the laws of nature but a human creation posited in order to deal with such natural laws.

world, brings a unity to knowledge production which would not be affected by the social atmosphere at the time.

Similarly when another person comes along and states that such a particular theory is merely an *opinion* of the evolutionary biologist, the biologist could reply, via a process of translation, that they could show evidence and data which proves that evolution is correct no matter what their own desires are, that the theory transcends the realm of a mere opinion of a societal world.

But by positing entities that transcend the boundaries of Nature and Culture, Latour 'creates' a category of hybrids that are considered to be co-produced while Modern theorizing is occurring. Latour also believes that these hybrids created via the process of translation are both needed and disregarded by modern scientific thinkers. They are a necessary component of theory making, since the process of purification alone will not allow theories to become reflective of human activity. Yet these hybrids undermine, in a sense, the true division of nature and culture. Scientists must have the hybrids for their knowledge production to have any value or relevance, but they must also keep the veil of the removed observer in order keep themselves from falling into a situation where every scientist worked from their own frameworks. If every scientist paid no attention to the work of others and actively tried not to fit within the current paradigm (not necessarily the Kuhnian paradigm) of scientific discourse, there would be no "progress" in the field. I intend to explore in this paper whether theorists do indeed both assert and deny the existence of hybrids as a necessary component to their process

of theory-making. If it is not the case then Latour's project would be irreparable. It is this notion which is the fulcrum upon which his view is placed.

Furthermore, the process of translation creates entities which are simultaneously necessary and destructive to the modern project. By transcending the categories of nature and culture, that is to posit and produce entities which are simultaneously in both categories (as opposed to a mixture of the two), the modern theorist creates hybrids. These hybrids are a necessary component of theorizing transcendently. Yet the existence of these entities cannot be accepted or recognized by the modern theorist since these hybrids are unable to be classified as belonging to only one or the other, nature or culture. It is then an integral property of the modern constitution that it "*allows the expanded proliferation of the hybrids whose existence, whose very possibility, it denies*".⁵ So, in short, the modern constitution is a declaration that modern thought must take as its task the separation of the categories of nature and culture through a process of purification while simultaneously asserting that any theories/entities produced by/with this divide must, in order to maximize the theoretical force behind them, undergo a process of translation. However, at the same time, theorists wish to accept part of what it means to make their created theories/entities transcendent and they must deny or ignore any portion of their theory/ entity which calls into question their original nature culture distinction.

The process of translation creates hybrids of the realms of nature and culture, mixing them both in such a way that they are ultimately ignored by those wielding the process of purification. Objects, such as automatons for instance, are manifestations of

⁵ Latour, 1993: 34

the hybridity of nature and culture in that a goal in the construction of such objects is the mimicking of human activities. Modern thinkers, according to Latour, both accept and deny the existence of such objects. They accept them only as objects of nature, that is, things which are to be studied in their *physical* reality⁶, but ignore the reality of how culture interacts with them. These theorists, according to Latour, do not examine the social political atmosphere that surrounds the creation of Boyle's vacuum producing device since it is seen as not an important component to the understanding of it. Yet the machine would not have been accepted as an example of good science had the political atmosphere been different. The battle that raged between Boyle and Hobbes shows that the political climate at the time was very divided and the route which science was ultimately to take hinged upon 'the interest of the masses'. The existence of the air-pump cannot be fully understood unless it is seen as a hybrid, as an object that is both natural and social.

For instance, the air-pump cannot be thought of as having developed outside of the political environment present at the time. As can be seen by Hobbes view of what the methodology of science should be, objects such as the air-pump would have little value. For Hobbes, it is through intellectual contemplation that the laws of nature would be revealed. Not unlike early physicists who arrived at theories of acceleration by contemplating what should happen instead of rolling balls down inclines to observe what did happen. The air-pump is only a valuable instrument in a society which has begun to value observable experiments as a basis of acquiring knowledge instead of knowledge

⁶ In other words, a reality that is based solely upon the world view as described by physicists. The world view presented as such would have no interest in other possible world views since the would be seen as threats to the world view of physics.

production being solely within the realm of contemplation. Indeed, without this acceptance of the observable experimentation, the air-pump might not have even been built. In this way the air pump can be seen as a manifestation of the emerging empirical methodology within early-modern science. Yet the air-pump is not solely to be understood as a cultural artifact expressing the state of its society of origin. The air-pump is also to be understood within the realm of physical engineering. In other words, the air pump could be understood as a series of tubes and pipes connected to an airtight glass box which could remove air from the box and, thus, create a vacuum within. It is understood as a culmination of different mechanical parts which work together in a specific way to produce a particular result. The air pump not only can be considered in both these ways, but, as a hybrid, must be. To understand the air-pump as a cultural artifact which can be seen as a manifestation of the emergence of observable experimentation is necessary but not sufficient to its meaning. To do so is to not understand the air-pump in its mechanistic nature. At the same time understanding the air-pump solely as an example of mechanics would not completely tell one what an air-pump is. Thus the air-pump is neither an object solely of Nature nor solely of Culture. Its meaning is derived by its connection, and most probably multiple connections, to both the realms of Nature and Culture.

After defining Nature, Culture and hybrids and how these entities coalesce into what it is to be modern, Latour goes on to state that, while such a constitution does exist, there are no theorist who actually follows it. While one can, through Latourian glasses see the constitution embedded in the methodology of scientists and other theorists from the time of Hobbes and Boyle to contemporary times, one can also see that these same

theorists do not completely follow the methodology to its ultimate consequences. For instance, theorists of the “hard” sciences embrace the methodology of the process of purification without any concern about the transcendence of their theories. Meanwhile, the social sciences embrace the process of translation without a deep concern about how their theories exist in the “natural” world. In this manner, Latour tries to show that the modern constitution does not exist and that the world is heading towards a new way of relating processes of purification and process of translation call non-modernity.⁷

The Problem of Pre-existence

David Bloor believes that Latour, in addition to misrepresenting the Strong Program⁸, falls prey to the same critique which Latour gives of sociologists of knowledge

⁷ Non-modernity (or amodernity) is not the same as anti-modernity according to Latour. For Latour the basic non-modern position is one that simultaneously takes into account the moderns’ constitution and the hybrids which are constructed from such a constitution (Latour 1993: 47). An anti-modern, on the other hand accept the modern’s notion of time passage which annuls the past which is created (Latour 1993: 47). The non-modern position is also not a post modernistic position since the postmodern position accepts that modernity did exist as advertised and also is based to heavily on critical deconstruction, has an ironic reflexivity in it theory building, and is anachronistic(Latour 1993: 135).

⁸ Bloor gives a succinct description of Strong Program:

The traditional stance towards the sociology of knowledge can be called the ‘weak’ programme. This involves the idea that socio-psychological causes need only be sought for error, irrationality and deviation from the proper norms and methodological precepts of science. Apart from this sociologists can, at best, illuminate the general conditions which encourage or inhibit science. Examples of this stance are to be found in the work of Lakatos (1971), Laudan (1977) and more recently Haack (1996). Followers of the ‘strong’ programme, by contrast, argue for the need to explain, in causal terms, all systems of belief regardless of how the analyst may evaluate them. It should be perhaps be stated at the outset that the causes in question have never been confined to social causes.

-- that the project does not get beyond Kant's *Critique* since it presupposes the existence of both nature and culture.⁹ Bloor's concern centers around Latour's proclamation of the co-production of science and society and the defining characteristics of what it means to treat nature and society in a symmetrical manner, especially when considering Latour's critique of the doctrine of symmetry that is held by the followers of the Strong Program.

According to Bloor, followers of the Strong Program define symmetry between nature and culture as being based upon the causal efficacy in bringing about beliefs.¹⁰ He states that, unlike these followers of the Strong Program, Latour's notion of symmetry does not look at effects to determine whether nature and society are being treated in a symmetrical manner. Instead Latour is focused on the emergence of nature and culture from a common basis, that they are two processes with a common cause.¹¹ It is this emergence of nature and culture which Bloor believes to be problematic for Latour's theory in that Latour's handling of these concepts presupposes the existence of both nature and culture.

Bloor's argument is as follows: Latour wants his readers, when thinking about social and natural actors, to suspend belief in the division between the social and the natural.¹² For example, when looking at Pasteur and his microbes or at Cuvier and his cranial cavities, a researcher should not try to differentiate between those entities that are

Such limitation would be incoherent. Sensory stimulation by objects in the environment always plays a central role. An account of this approach can be found in Bloor (1976) and Barnes *et al.* (1996)

Bloor, David *Anti-Latour* Studies in the History and Philosophy of Science Vol. 30 No.1 1999: 81

⁹Bloor: 98.

¹⁰Bloor, 96

¹¹Bloor, 96

defined as social, such as Pasteur and Cuvier, and those that are defined as natural, such as the microbes and implications of the size of cranial cavities. While the goal of suspending belief might seem problematic to some, for Bloor the real area of concern comes at the point at which this goal connects with methodology. Latour believes that the issues which arise due to the division between nature and culture should be in the forefront creating a sociological language that as yet does not exist which will keep the division between people and things held in suspense.¹³ Instead of dealing with microbes, one should deal with what Latour calls 'quasi-objects', or 'entelechies'. Bloor interprets this mode of thinking the same as saying that one should think of Pasteur as if he were a microbe and microbes as though they were Pasteur. This approach, to Bloor, shows that Latour is not holding the two categories of people and things, culture and nature, separately. Instead, one sees Latour blurring together general metaphysical claims and specific historical issues of particular historical cases.¹⁴ So while in the process of explaining the process of co-production of nature and culture, Latour speaks as if microbes have intentions such as beings murderers or unwelcome guests.¹⁵ Quoting Latour, Bloor thinks that the only escape that Latour offers from this realm of ambiguity is the postulation of new social links which simultaneously define and redefine nature and culture.¹⁶ This is where the terminal problem arises for Latour. If it is true that it is a social link that is defining nature and culture, then Latour must be presupposing nature and culture. A social link is only possible in a social matrix. One cannot have social

¹² Bloor, 96

¹³ Bloor, 96

¹⁴ Bloor, 97

¹⁵ Bloor, 97

¹⁶ Bloor, 98

links without a preexisting society since in order to have practices one must have the framework of a society upon which to hang.¹⁷ Before practices, in any way interpreted in what Bloor calls the 'usual sense', comes a social world for the practices to be fitted. Therefore, according to Bloor, Latour's whole process is circular and ends up right back at the beginning of the process, with nature and culture as two separate categories.

I believe Bloor's interpretation of how Latour understands the co-production of Nature and Culture misunderstands the relationship between the process in which hybrids are created and how this relates to the 'constitutional guarantees' of transcendence and immanence in two distinct ways. First, it seems that Bloor, in his interpretation, is not differentiating between the strategic use of immanence and transcendence as two distinct poles of Nature and Culture. For Latour these are two distinct sets of categories, one of which he wishes to keep in his 'non-modern constitution' and one of which he wishes to let fall by the wayside. Second, Bloor confuses the mode of explaining Latour's network formations and the reality which Latour is attempting to explain. The direction which Latour approached his explanation of co-production should not be considered part of the explanation itself. Let us look at these two responses to Bloor's critique one at a time.

First, as I have stated Bloor does not note the difference between the sets of Nature/Culture and transcendence/immanence. This difference is best understood by looking at how each of these sets of categories are used. First we shall look at the Nature/Culture dichotomy. For Latour, Nature and Culture is a designation used by the moderns in order to separate the orders of reality. As explained above this split into two distinct opposing poles divided reality into these two distinct spheres in order to better

¹⁷ Bloor, 98

understand the reality of the modern world. It is the modern claim that Nature and Culture are situated as *a priori*, as an epistemic origin of knowledge while also claiming a realist metaphysical position. Nature and Culture were two spheres where knowledge was to be produced. For the modern world the notions of transcendence and immanence are to be directly tied to these two poles of Nature and Culture thus giving the explanations to come from these areas their expletory power. The disavowed hybrids of the 'Modern Constitution' were a combining of these areas of knowledge geneses.

So, for example, take the production of the sets of sensory hairs which are produced behind the wings of a fruit fly. If one were to try to explain the occurrence of the number of hairs which are being produced there in a modern mode of theorizing, one would turn to the expletory power of Nature with its transcendence. The generation of these hairs of course has nothing to do with the culture surrounding the fruit fly. The fruit fly's production of sensory hairs is linked to the gene whose activation causes a sensory hair to grow. If one wished to predict the future number of sensory hairs on a fruit fly one must find out how many of the cells in the area of the wings have the gene for sensory hair production.¹⁸ Nature, with its genes and environmental effects, interpreted as transcending the knowledge of the moment, gives science the foundation for the truth scientists search for by understanding genetics to be removed from the opinions which any particular Culture has set in place. Thus to understand the fruit fly's

¹⁸ Yet such a prediction is impossible to make. As Lewontin notes in his text, given identical environmental situations, the number of sensory hairs produced by fruits flies cannot be predicted with any accuracy. The production of sensory hairs relies upon more than just genes activating. In this case Nature does not give a good account of sensory hair production. Lewontin seems to be giving an account which is similar to a non-modern approach to knowledge production in contemporary science.

sensory hairs one must accept the transcendence of Nature while denying the immanence of Culture.

This is not surprising since it was upon a particular understanding of immanence and transcendence that these particular pictures of Nature and Culture appear. Immanence and transcendence were seen to be contrary modes. For the modern, a process which declares immanence cannot simultaneously declare transcendent leaning and vice versa. It is in this way that, according to Latour, Nature and Culture gained their contrariness as well. Yet for Latour immanence and transcendence need not be considered as such.¹⁹ The forces upon which knowledge are based are shifting and transcending any particular cultural perspective of the moment. Transcending natural laws do not have to be in opposition to the immanence of humankind as free to create the networks of knowledge as they see fit. For the non-moderns the notions of immanence and transcendence are to be considered to be a unified proposition distinct from the binary oppositional affects of the Modern Nature/Culture distinction.

Let us now turn to my second response to Bloor's critique: Bloor's confusion of explanandum versus the explanans. Bloor is correct that Latour does use notions of nature and culture to explain the non-modern's caretaking of hybrids. Indeed, it would be strange to think that Latour would be trying to explain hybrids without the notions of Nature and Culture for the objects to be a hybrid of. But these uses of the terms nature/Nature, culture/Culture, and hybrid are a means of explaining Latour's position from a certain starting place. It is Latour's project that he not only gives an account of what non-modernity is, but also a genealogy of pre-modernity, modernity, and non-

¹⁹ Latour, 1993: 128

modernity. It is also true that this account is to be given to those who inhabit a modern world. All of these restrictions on Latour's project guide the way in which the project manifests, and Bloor does not take any of this into account.

But what does this mean? It means that Latour is trying to explain a world view that does not have an adequate language yet. This being the case, Latour uses the language which he has at hand in new ways in order to describe reality as he wishes it to be understood. One must try to understand the terms which Latour uses in the way that he intends and without the historical baggage already associated with it. Bloor incorrectly thinks that by using the notion of hybrid, and that this hybridity is integral to the co-production of nature and culture, that hybridity must allude to the Nature/Culture split already existing. As stated above the notions of nature/culture and Nature/Culture are two separate distinct understandings of the direction of knowledge production. If looking at Nature and Culture one sees that moderns have used the notions as a basis for separating theories which were needed by people to be seen as eternal, from world views which needed to be understood as under the direct control of humans. By having the notions of transcendence and immanence embedded within the notions of Nature and Culture knowledge production must proceed from Nature or Culture if the knowledge is to gain the advantage of having transcendence and/or immanence.

But as was explained above, for Latour immanence, need not be tied to Culture nor transcendence to Nature. The direction of knowledge production is reversed for Latour. To better understand this, let us look at how hybrids fit into the picture for both modern and non-modern world views. For the Modern to understand hybrids²⁰ they

²⁰ That is, if the modern theorist did not discount the existence of the hybrid immediately.

would look for the meaning of the hybrid in the realms of Nature and Culture. The hybrid would be considered to be a mixture of Nature and Culture since the meaning of the Hybrid would be arrived at by mixing meanings already present in the knowledge sets of Nature and Culture. Meaning, and therefore knowledge production, of hybrids for the Modern prospective must flow from Nature/Culture to hybrids.

But in Latour's non-modern position, the flow of meaning and knowledge production is directed in the opposite direction.²¹ An entity whose existence is referred to as a hybrid would be looked at as simultaneously informing what nature and culture are.²² The hybrid would not be seen as merely a mixture but a homogenous entity whose meaning is comprised by a network. This is different from the modern notion of hybrid as a mixture of Nature and Culture. Instead the hybrid should be thought of as a single entity whose meaning is located within a shifting set of relations to many other entities. The hybrid can then be used, within a network of many other hybrids, to create a distinction of nature and culture. Such a distinction would be used as the distinctions of color to sight or timbre to sound might be. The distinction would locate objects as nature perhaps because of their generation without the aid of human intervention or perhaps as culture due to the intimate ties to a particular culture the entity has.²³ But the important thing to note is that meaning and knowledge production flow from the hybrids and the

²¹ Latour, 1993: 128

²² Latour, 1993: 139

²³ It is hard to completely understand what these designations would mean. Latour is setting up the framework for a discussion of the meaning within these designations to be flushed out. As Latour states many times in his texts, the language needed for the work of the non-moderns has not yet been created. Indeed, it seems that one of the major projects for the non-Moderns to pursue is the constant revaluation of the meanings of nature and culture and the networks of knowledge shift with the inclusion of new hybrids to the mix.

networks which construct the hybrids towards the notion of nature and culture giving a better understanding the requisites of each designation in relation to the set of networks which presently are dominating. As Latour states, theorists would be placed not upon essences which are eternal but instead upon a presenting, a performance, on a process which is a movement and a passage.²⁴ To borrow from Nietzsche, Latour's science would not be a fixed enterprise of old men hunched over their books solemnly reading being lulled to sleep, but a 'gay science' in which the scientists approached every learning opportunity with the enthusiasm, wonder, and imagination of a child. A continuous and dangerous existence indeed!²⁵

The Danger of Hybridity

In an interesting position contrary to the work of Bloor, Mark Elam puts forth several critiques of Latour's project based not upon the romantization of the pre-moderns nor, as Bloor states, upon an overuse of social forces for his own goals. Instead Elam, looks at how Latour seemingly closes his eyes to social forces at work and how the practical use of hybrids reinstates not only the modern viewpoint, but the modern viewpoint with all of its racism, sexism and colonialism intact.

Elam's critique is concerned with two particular facets of Latour's vision of modernity and the role of hybrids. The first facet is the manner in which 'we' as Western modern/non-moderns are separated (or purified) from 'them' the non-Western pre-

²⁴ Latour, 1993: page 129

moderns. Elam's second critique is that this separation is not a move away from the methodology and politics of modernity, but a shoring up and rearticulation of the modern position by defending the social/political weak spots inherent in it.²⁶ In this section I will look at these two critiques and respond to them one at a time. First, I shall explain Elam's concern of the separation of the moderns/non-moderns. After laying out his critique I shall then respond to this first critique. Next, I shall then explain Elam's second critique concerning the use of hybrid/ity as the bridge between the Great Divide which modernity has placed between Nature and Culture. I call this critique the *Colonialist Error* critique. This second critique, itself, is composed of two parts. The first focusing on what Elam sees as a unequal valuation of the symmetry which Latour gives between pre-modern, modern, post-modern, and non-modern positions. The second critique focuses on the use of hybrid/ity in particular as the notion which is to bring together Nature and Culture. After having explained this second critique I shall respond to this new critique in turn.

Let us first look at Elam's first critique. According to Elam, a separation is apparent right from the title of the text, it is 'we' who have never been modern.²⁷ There is a symmetry which is set up in which it is very clear who 'we' are and who 'they' are

²⁵ Latour, 1993: 129

²⁶ It is interesting to note that throughout Elam's article Latour seems to interpret Latour constantly devaluing pre-moderns in his description and understanding of their contributions, at the same time Sandi Cohen, another theorists who is critical of Latour's work in *We Have Never Been Modern*, states that Latour is constantly trying to set the pre-moderns upon a pedestal so that the western world could begin emulating them. While it seems that both of these responses do not accurately reflect Latour's position on the relation between non-moderns and pre-moderns, it is interesting how the same text is used for such completely contradictory and extreme view points.

²⁷ Elam, Mark *Living Dangerously with Bruno Latour in a Hybrid World* Theory, Culture & Society Vol. 16 No. 4 1999: 4

and that even in the new vision which Latour is wishing to show, 'we' are still not 'them'.²⁸ This arises out of Latour's not fully examining all the possible relationships that occur between the components of hybrids; while identifying the human/non-human with the relation with that between man and machines, he ignores other humans and non-humans.²⁹ He does not even look at the differences between humans that fall under the same hegemony. For example, in *We Have Never Been Modern*, Latour completely ignores the issue of sexual difference. The relationship which both western and non-western women have with modernity is not examined and, from this it can be assumed that the issue is deemed unimportant to the notion of a construction of modernity. As Elam states:

By continuing to leave women's otherness *unrepresentable* in his representation of our non-modernity, Latour is guilty from a feminist point of view of breaking a complicity between masculinity and rationality, only to affirm his support for a new and potentially more powerful connivance between masculinity and the construction and regulation of hybrid networks.³⁰ (emphases added)

If sexual difference is swept under the table in Latour's theory, Elam argues, so too can national differences. Latour is guilty himself of using the process of purification in Elam's eyes by focusing only on certain parts of the modern narrative and ignoring others. It is also important to see here that Elam does not only state that these categories are ignored, intentionally or not, by Latour but that these positions are deemed unrepresentable in the project. Latour's foundation is constructed such that even if one was willing to concern themselves with the issues of otherness in the construction of

²⁸ Elam, 4

²⁹ Elam, 5

hybrids one cannot. The construction of hybridity and the colonial intellectual baggage carried with it makes such critiques impossible due to Latour lack of recognition concerning these issues.

Elam's believes that even if Latour is in disagreement with the construction of modernity as represented above, he cannot help but interact with the issues which women and strategic studies communities have concerning pre-/modernity. In order to seriously consider the structure(s) of modernity, especially when notions of non-western pre-modern societies are involved, Latour must take into consideration of transnational political/postcolonial theory. These theories bring to light aspects of the modern world which, if his description of modernity must deal with if it if to be taken seriously.

I believe that Latour's description of modernity can be modified to meet these criticisms. Even though Latour fails to discuss the effect that gender has upon the construction of a modern perspective, his theory is not intrinsically opposed to such a move. We can see this by looking at Latour's description of the founding moments of the modern constitution and the criteria which is considered to be of importance in this descriptive moment.

As noted earlier, for Latour the modern constitution emerges in the scientific and political works of Hobbes and Boyle. In the 17th century an intellectual battle was waged between scientist/philosophers Hobbes and Boyle, and the prize was the methodology of theory-building itself. While in agreement concerning most aspects of their world (the need for a king, a unified church, and fervent belief in mechanistic philosophy) these two

³⁰ Elam, 5

icons of Northern/Western thinking feuded over the existence of a vacuum in Nature.³¹ For Hobbes, scientific discovery was not to be based upon opinions or observations but solely upon non-transcendent mathematical demonstrations. There is no need to place individuals into a “state of nature” to show that they will ultimately form an overriding “state of society” under the control of a political Leviathan put into power by social contract. One needs only to reflect upon the situation and, once all the pieces are laid out upon the table, a simple computation will lead a rational thinker to the same conclusions that Hobbes arrived at. A vacuum cannot exist because there is no way one can imagine that one can exist, and given the erroneous nature of perception and fallibility of peoples’ opinions, the only path which a society should progress along is one that bases its decisions upon mathematically demonstrable theorems.

Boyle, on the other hand, instead of following the scholasticism of thinkers of his time, relied upon opinion. In order to prove the existence of the vacuum, Boyle creates an air pump that would pump the air out of a small chamber which could be viewed through glass panels. Boyle then used this air pump to conduct many experiments that ‘proved’ the non-existence of ether wind, suffocated small animals, and snuffed out candles.³² The important aspect of his demonstration was its dependence upon the verification of what happened by those in the community, thus giving birth to parlor science of the eighteenth century. The experiments were held in locations where Boyle could assemble “credible, trustworthy, well-to-do witnesses”³³ to attest to the existence of facts. Certain types of opinion were acceptable as facts and were classified according to

³¹ Latour, 1993: 16

³² Latour, 1993: 17

³³ Latour, 1993: 18

two criteria.³⁴ First, the opinion must not be gathered by the observations of the masses tainted by their imaginations. The general population was not to be trusted as able to give an accurate assertion of the particular facts in question. Unlike Hobbes, who believed that most anyone could be made to understand on some level the truth of a proposition if it was demonstrated mathematically, Boyle's observers needed to possess a 'higher' level of intelligence and awareness than the average person. Boyle looked to his gentlemanly peers for credible observations, not the completely uninformed masses that could not understand any of what they observed. Second, Boyle argued that the observers need not know the actual nature of what is happening. It is only important that they were there to witness that a small animal died or that the candle flame was snuffed out as the chamber was evacuated by the air-pump. Understanding or even speculating about how the pump moved the air, that a vacuum was created, or why the animal died and the candle went out were not necessary for the reliable witnessing of observed facts. This means that the scientists like Boyle sought out observers that had a certain level of education, but relied upon the witnesses being not fully educated concerning the matter at hand. The perfect observer was one who paid attention to observable facts and keeps them distinct from personal speculations about their causes.

Boyle's model of science triumphed over Hobbes and it is the resulting use of this model by modern scientists that deserves a closer look through a feminist lens. Boyle's choosing who would be considered a reliable observer and opinion giver demonstrates clearly that, from the beginning of modern science, only specific individuals' voices are the important voices within a discourse. As stated above it was necessary for the

³⁴ Latour, 1993: 18

observers to have at least a certain level of understanding of what was going on during the experiments with the air pump, an understanding the only Boyle's peers could have. Boyle's need to find observers who were credible, trustworthy, and well-to-do in addition to the observers possessing a certain 'moral constitution'³⁵ and being members of the Royal Society³⁶ of shows clearly that there were prejudicial to the culture which Boyle was a part. The opinions of those who were of a different race were too savage and superstitious, according to the average eighteenth century scientist, to rely upon as credible. The same is true for the supposed wild imaginings of women and those of lower economic standing as well. A credible witness is going to be one who has had a certain amount of education that was not available to women of the eighteenth century. This level of education was not attainable by those who did not have the monetary means. The declaration that a reliable witness must also be well-to-do, which included the person's social status and the amount of property owned, put that individual in a particularly informed position from which to determine the scientific 'facts' of the eighteenth century. These characteristics are in line with the cultural markers that divide modern European society into those who are more valuable in a society. It marks those

³⁵ Shapin, 58-59. As Shapin and Schaffer point out in their text, this need for a certain moral constitution is one of the more obvious instances showing the intermingling of politics/ethics and the production of knowledge (such as that produced by science). Another such instance is the commonality between what is considered to be a reliable witness and the judging of truth for scientific experiments and for legal matters in the modern world. Indeed, for both scientific and legal matters depend upon the testimony of multiple reliable witnesses. It is the job of these witnesses to provide support in front of juries, both real and metaphorical, in order to cause a certain judgement concerning the truth of the matter at hand. For more on this, read pages 55-58 of Shapin and Schaffer's text.

³⁶ Shapin, 218. It is also interesting to note, as uncovered by Shapin and Schaffer, that testimony given by witnesses who were not members of the Royal Court was

who have the privilege of being helpers in the production of knowledge which is used in the Western world to understand the whole of material reality.

This is the reason why it is important to know the social position of the travelers whose factual declarations scientists like Cuvier used in his analyses of the physiological construction of people of southern Africa. One can imagine that these travelers had the same criterion for respectable eye-witnesses as that which was laid out by Hobbes. If this is the case then it can be supposed that these travelers had to have been European and white, for the observations of any of the 'other races' would be viewed with suspicion. We can also state that these travelers were probably of some degree of wealth since constant travels to the sub-Sahara were not available to everyone, only those who could afford to make such trips. One thing that we do know is that these traders and wealthy collectors acquired thorough various means 'oddities' from around the world.³⁷ Latour identifies this mode of collection as a move by which the power of Western science is established over non-western theories and the domestication of the 'savages' can be accomplished by making 'the wilderness known in advance, predictable'.³⁸ This is important to see because it is not solely a colonistic ideology that guides the acquisition of fact, but the particular form of colonistic ideology that is held by those in the colonizing countries of the elite class. Such individuals often held perceptions of the world which included ideas such as the manifest destiny of Europe, the right to 'acquire' other humans through many different means, including monetary, and the equation of the poor in their own countries as tainted (either physically or mentally). These perceptions

immediately disregarded due to its lack of reliability. Boyle used this defense multiple times in his career.

³⁷ Terry: 23

surely guided these individuals to make claims which were in line with their political world views.

But it is also important to see that Boyle's model also creates the category of the "expert" which must be maintained in a successful scientific experiment. The observers value as only observers of a fact and not as true peers who understand the mechanics of the experiment puts the scientists in possession of the experiment firmly in control of the meaning of the facts. Boyle, the expert of the air-pump example, only wished for his observers to witness the snuffing out of the candle. If the observers were to understand the air-pump fully they would be competition for Boyle in the creation of the meanings associated with the observable facts.

Cuvier's reaction to those reports concerning the sub-Sahara show how this use of a hierarchy of knowledge can transform the facts that were being gathered. In order to support his discovery of the 'Hottentot Apron', Cuvier had to disregard those reports as erroneous that conflicted with his findings.³⁹ As the 'expert', Cuvier could state that he could tell the difference between Hottentots and Bushman while the comparative ignorance of those who reported facts could not make such a distinction. Therefore any information that could be gathered by a 'non-expert' can be thoroughly disregarded in the interest of the expert and their agenda. For instance, if we look at Samuel Morton's measuring of the size of the cranial cavity of various races during 1844, we see that racist agendas based upon bad stereotypes were common in modern sciences.⁴⁰ To measure cranial cavity, and thereby understand the intelligence potential of a race based upon how

³⁸ Latour, 1987: 218

³⁹ Terry: 35

⁴⁰ Gould, Stephen Jay *The Mismeasure of Man* Norton Press, 1996: 93-99

large a brain would fit in the cavity. Morton, when measuring the cranial cavity of Africans, chose the females of the 'Hottentot' tribe as those who were to be measured. This procedure in itself shows how the intersections of race and gender become articulated in such a manner as to shore up the claims of the privileged in Europe. Morton chose a people whose stature is generally smaller than most in Africa and a gender whose stature is generally the smaller of the two genders recognized by science. So while brain size does not determine the levels of intelligence possessed by a person, one can see that the modern period's assumption that women were not as intelligent as men was used to help 'prove' that Africans were not as intelligent as Europeans. By using the smallest skulls available to him, Morton could give empirical evidence to his audience that indeed the cranial cavity of [some] Africans was smaller than [some] Europeans. Such theories were made in part to justify the use of Africans in the slave trade and the need to 'go help the savages become more civilized' through colonization.

With this in mind the Boyle model of science tells us two things concerning the creation of scientific theory. First, there must be observers to a scientific theory and that these observers come from very specific location within the social matrix. Only those with the cultural markers of trustworthy, credible and well-to-do are allowed in the arena of knowledge production, even if only at the periphery. This makes it clear, contrary to Elam's claim that Latour's theory cannot see the effects ones location in the social matrix might have, that knowledge production in the Latourian sense can be seen as dependant upon ones race, class, and gender. If the knowledge being produced is being done so solely by a cultural subset that is the hegemony of the larger cultural body, then the ideology of the hegemony will become inherent to the knowledge being produced. As

we see in the case of Sarah Bartmann and the cranial cavity measuring of Morton, the socio/political views of those who are allowed into knowledge production are carried over into the classifications of race, bringing with them all the preconceptions and power relation inherent in holding those views.

Second, in this it is the gaze of the scientists and the observers which gives meaning to that which is gazed upon. The signified is thus blurred with the signifier in such a way that truth is not an uncovering of the reality of the signified, but a hybrid of the both. Indeed, it is the spectacle of the parlor physics that is the foundation of scientific truth. And for the experiments, the only information that is known about them is from the gaze of the scientists.

Thus it can be seen that Latour can be used, like Anne Fausto-Sterling does in her examination of the 'hottentot' Sarah Bartmann, as a framework for a post-colonial analyses. At most it can be said that Latour's project is one in which a detailed analysis of particular cultural separations between a pre-modern perspective and a non-modern perspective is not given. Even though this project was not Latour's, such a project is conceivable for Latour. While it is true that Latour does not offer examples of the connections between non-human machines and humans, nor non-human machines and other non-human entities, a similar approach can be taken. Since most, if not all entities can be considered in a hybridic state, relational analyses becomes merely a matter of analyzing the networks with which the hybridic entities are located, as I have done above. Elam's fatal error is that he forgets that for Latour, hybrids do not arise out of a combining of two pre-existent categorically located distinctions. The Latourian hybrid is not a mixture of nature and culture, it is a co-producing of them. By referring to entities

as either “we/us” and “they/them” Latour is using a distinction which indeed is used by modern theorists as well as non-modern theorists, but this distinction is used as markers to keep track of groups of people as identified by the moderns. This text is for a particular audience, one that is enmeshed in a modern framework and its goal is to show such an audience that their perception, at least in regards to the modernity of the Western world, is incorrect.

Having dealt with Elam’s first critique of Latour’s work, as stated at the outset of this section I shall now turn my attention to his two-part second critique. The second critique that Elam lays out is concerned with the use of hybrid/ity as the method to re-envision the Great Divide which modernity has placed between nature and culture. Elam states that Latour’s project is not to deconstruct this divide and thus also deconstruct modernity. The goal is to construct a new position of non-modernity that can better overcome the failings of modernity by focusing on, as opposed to denying, the existence and relations of hybrids.⁴¹ The only important differences between modernity and Latour’s non-modernity, according to Elam, is that Latour believes the differences illustrated by the Great Divide are contingent instead of necessary, manufactured instead of given.⁴² By looking at how Latour navigates the Great Divide Elam believes we can see that Latour does not truly leave the providence of modernity as he intends but instead has moved to the defense of the modern world by solving the anomalies which have surfaced in the modern paradigm.

Elam’s interprets Latour’s attempt to bridge this gap to be the positing of a symmetry that exists between those who are pre-modern and those how are non-modern

⁴¹ Elam, 10-11

in regards to their use of networks as the foundation for belief claims. This leads to Latour's perspective that non-moderns and pre-moderns are different only in size and not in kind.⁴³ It is not that there are any difference in the framework of knowledge, both are based upon networks which, to borrow the language of the moderns, combine culture and nature. The difference is that non-moderns have created more and longer networks, co-producing nature and culture with hybrids, than pre-moderns have been able to do by not historically trying to divide nature from culture in the first place.⁴⁴ It is this mediation by non-moderns which gives them the edge on knowledge production. With the more complex language and symbols to define the world, the non-moderns can even do tasks that pre-moderns cannot do, namely tasks such as being able to use the category of non-human in order to gauge the differences between humans in their production of networks.⁴⁵ But aside from this minor point there is no difference between the non-moderns and the pre-moderns.

But for Elam it is this small difference that undermines Latour's own goals. It does so in that, by stating that the non-modern's approach to knowledge production can handle more situations due to the acceptance of a brand of theoretical entities, one cannot

⁴² Elam, 11

⁴³ Elam, 12

⁴⁴ Elam, 12

⁴⁵ This should not be interpreted as giving more value to non-moderns as opposed to pre-moderns. What this shows is a difference in what can be considered potential material upon which theorizing can be done. In other realms the epistemological position of the pre-moderns has values over moderns and techniques which non-moderns must learn, i.e. having close relationships to hybrids. Also, Latour's claim concerning the non-modern's larger networks does not have in it negative claims concerning any other aspects of pre-modern culture. Elam seems to be insinuating that Latour, through his analyses, claims that pre-modern culture has less value because of the size of potential networks. I do not see where Latour makes such a claim. Critiquing the intellectual methodology of a culture does not necessarily lead to the devaluing of that culture.

state that the two methodologies are categorically the same. It is not true that the difference is merely one of size, the use of hybrids and the proclamation that the methodology of the non-moderns inability to use and/or make theories of a certain level of sophistication creates a divide between the non-moderns and the pre-moderns that is hauntingly similar to the division created by modern thinkers. Pre-moderns are thought to be naively stumbling in the dark by both systems.⁴⁶

This problem is further deepened, according to Elam, by Latour's use of hybrids as a key notion in the networked connections between culture and nature for the non-moderns. Elam's main concern here is that Latour never addresses the relationship between the modern colonial project and the production of knowledge claims within the projects of science, especially within the concept of hybridity.⁴⁷ By analyzing the etymology of the term hybrid, both from its Latin root and in its use in Europe starting in the 17th century, Elam shows a picture where the notion of hybridity has, historically, been used in assimilative colonial discourses with the goal of essentializing differences and asserting power over those in the state of nature, i.e. the third world. Latour, by claiming that hybridity is the most appropriate manner by which we are to understand the symmetry between nature and culture, has adopted this very modern notion of what it is to be pre-modern and the value which is to be associated with this grouping. Elam's interpretation of Latour's valuation of what would be a non-modern science over a pre-modern network is based around the claim that non-moderns have been more willing to hybridize themselves and 'enter into more intimate liaisons with non-humans'.⁴⁸ Pre-

⁴⁶ Elam, 13

⁴⁷ Elam, 13

⁴⁸ Elam, 15

moderns, due to their lack of self hybridization, cannot enter into such a relationship. The project which Elam sees Latour arguing is for non-moderns, the creators of hybrids to ‘become better parents and start thinking very seriously about the need for hybrid family planning’.⁴⁹ The hybrids are the creations of the West and allow for a more effective relationship between nature and culture. If this is the case, how can it be said that there is a symmetrical relationship between non-moderns and pre-moderns. Especially given that the non-moderns have in actuality not moved very far away from modernity in regards to major driving force such as colonialism. On a level of discourse, Latour can be seen as a theorist who embodies the new trend of *Europism* instead of the older and less defensible *Euro-centric* model.⁵⁰ Instead of escaping from the scientification which he is trying to disarm, Latour only succeeds in intensifying the struggles between the narrative of science and the discourse of science studies.⁵¹

Elam’s critique as laid out above, which I shall call the *Colonialist Error*, is based upon two key components: First, the possible differentiating within ‘the principle of symmetry’ between non-moderns and pre-moderns in such a manner as to give unilateral value to the networks of the non-moderns while simultaneously creating a definition of what it is to be pre-modern which is devoid of any value with respect to knowledge

⁴⁹ Elam, 16

⁵⁰ The difference between the *Eurocentric* model and the *Euroupic* model is based upon the direction of intellectual and material attention. The Eurocentric model is an offensive position that holds the material and intellectual wealth of Europe is more important than that which is held by those in the third world and that such wealth should be rated against the European model if one wishes to understand its value. *Europism*, on the other hand, is a defense against the contemporary post-colonial theories. Its goal is to protect the wealth of Europe from the encroaching third world by devaluing third world theorists, limiting the immigration of third world peoples, etc.. For further explanation look at Helma Lutz’ article *The Limits of European-ness* in *Feminist Review* No. 57, Autumn 1997

production. Second, the colonialist nature of ‘the great divide’ and the use of hybrids to bridge this gap. While Elam being incorrect in either one of these key points would do serious damage to his critique, his being wrong on both accounts would make his critique, while interesting from the standpoint showing the importance of considering international social matrixes and power structures, unable to invalidate the work of Latour. At most it shows a possible direction with which to take Latour theories to a more complex and interesting destination and give reasons why such a move would be important. It does not, however, show that at a fundamental level Latour’s position is indefensible. It shows that Latour’s work is a starting point upon which further theorizing should be built upon.

So let us look at these two points of the Colonistic Error one at a time. First, does Latour create a differentiation between the categories of non-modern and pre-modern which values the former over the latter while stating that the latter has no value whatsoever? The answer to this question is no, Latour does not. Latour does state that he believes that the non-moderns have created longer networks and are more able to analyze the differences between moderns, pre-moderns, and non-moderns, but there is no indication that this makes non-moderns somehow more valuable than pre-moderns. The pre-moderns have networks which were arrived at without the intermediary step of separating Nature and Culture prior to creating hybrids to bridge this gap and are, therefore, at home in a world of hybrids. Instead of merely ignoring the hybrids which they have created, such as the Moderns do, the pre-moderns have a system which allows them access to a constantly shifting framework of belief systems which does not have the

⁵¹ Elam, 20

cumbersome need of being tied to a historicity. Also the pre-moderns have the ability to use transcendence without creating the modern contradiction, condone the multiplication of non-humans, and base their notion of temporality by its intensity⁵².

As can be seen by his chart on page 135 of *We Have Never Been Modern*, Latour does not consider the pre-modern position as one of utter inferiority which is devoid of any value, but a methodology of theory building which has several aspects which Latour would see incorporated into his own notion of how theory building should occur. The pre-modern position is set aside such position as the modernist and the postmodernist positions on equal consideration. In addition, Latour retains and rejects methodologies and epistemological claims from these three modes of theorizing without giving dominance to any one position. Just as much is rejected and retained from (post)modernism as is from the pre-moderns. It is within this construction of the non-modern that we see a symmetry forming in the handling of these various positions. And while a modernistic colonial position would most likely address the pre-modern stage of development as similar to the distant past of modernity, thereby continuing a colonialistic approach to the subject matter, Latour's handling of pre-modern theory building does not fall into this same trap.

This is not to say that Latour's handling of pre-modern theorists is without its problems. Latour's position, in that it is walking the line between theoretical constructions and the conditions present in the material world, does borrow some of the language of the modern world which he wishes to show is passing. But his usage does not place him in danger of falling into modernity, but it does place him in a position of

⁵² Latour, 1993: 132-135

not describing the pre-modern third world in as positive of a light as the non-modern world.

Theorist Lisa Lowe has an approach to a similar situation which I think could easily be adopted to this situation. In her text, *Immigrant Acts*, one of Lowe's main projects is to show a new aesthetic which is surfacing in the Asian-American population's historical and literary narratives. In this discussion she states that the immigrants' use of their narratives have the same end result as post-modern narratives yet does so from a particular historical location which causes different aspects of the material world to have primacy in the telling.⁵³ While both narratives examine the problems of the contemporary Modern world such as notions of the atomistic political self, they do some passing through different intellectual terrain. The post-modernist comes from a location that is based highly in the academic philosophy of the 20th century. It locates its positive theory building from the perspectives of the questions of this philosophical society.⁵⁴ Third world theorists also question this notion of the atomistic political self, but do so by privileging the contradictions inherent in the immigrants' situation over the contradictions in 20th century European philosophy.⁵⁵

Latour can easily be seen in this light. Though Latour would have problems being in such company and the postmodernists⁵⁶, one can understand Latour's ousting of the modern world to be in a similar position with regards to pre-modern third-world theorists with the same goals. Latour wishes to show that the world perspective from the

⁵³ Lowe, 107

⁵⁴ Lowe, 108

⁵⁵ Lowe, 108

⁵⁶ Since Latour states that we have never truly been modern, being post-modern can be seen as even a more difficult position to hold.

modern point of view is failing due to the contradictions inherent in the 'modern constitution'. Many post-colonial theorists have the same goal. Both Latour and post-colonial theorists rely on notions of hybridity as key to the understanding and undermining of the modern world view. While there are many such similar goals these two modes of theorizing are merely passing through different intellectual terrain which will lead to the same end. Latour is approaching this goal by looking at the questions and concerns which are located in the philosophical community of late 20th century Europe. Theorists such as Lisa Lowe and Donna Haraway and novelists such as Achy Obejas' approach this same end but from the perspectives of Asian-Americans, women, and Cuban-Americans. The so called pre-moderns are not ignorant to the same problems which Latour sees in the pre-modern system. Much of what one reads in critical and post-colonial theory works along the same lines as Latour, it just focuses on a different location.⁵⁷ This being the case, Latour can at most be blamed for approaching the topic from the European philosophical starting point. But even here thinking of Latour's approach as something that is blameworthy is too harsh, even from the postcolonial perspective.

Let us now look at the second component of the Colonialist Error; Is Latour repeating a modern position by adopting a colonistic approach to the bridging of the Great Divide? The answer to this question is also no. While bringing up this critique Elam states that Latour's position could be held without any problems if Latour would have noted the colonialist history of the notion of hybridity as does Donna Haraway in

⁵⁷ Once again, Fausto-Sterling's article of the treatment and examination of Sarah Bartman, the 'Hottentot Venus' is a perfect example of Latour's work and a critical post-colonial theorists project approach the same ends through different landscapes.

her treatments of the subject. By adding the disclaimer, Elam supposedly thinks that colonialist overtones to the notions of hybridity can be erased.

But this point is almost an absurd point to take. While historically the notion of hybrid may have been used in colonistic ways it does not mean that the conceptual work that the notion does is forever tainted with colonialism. If it is the case that Elam thinks that merely stating a disclaimer could overcome this problematic history, then it seems that even he is showing that the contemporary usage of the concept has moved considerably away from its historical usage. Much in the same way that Thomas Kuhn usage of the concept of a paradigm has changed the conceptual work of this term from inhabiting solely the realm of linguistics to include the space of theoretical exemplars as well, the notion of hybrid has moved far from its origins. By needing to do a historical analyses of the term for his readers assumes that they are not aware of such colonistic overtones to the notion of hybridity historically existed. If it is the case that few to no people are aware of such a tenuous history and the historical baggage of the term has little material effect, then perhaps Latour's usage of the notion cannot be intending or carrying any colonistic overtones to the notion in the conceptual work hybridity does in his theory.

Latour and Marx

For all this Latour is not wholly removed from modernism in his methodology. Donna Haraway, though she does not explore this fully, claims that the general

methodology which Latour uses in *We Have Never Been Modern* replicates the modernistic tendency of using historicity as definitively revealing the nature of a thing. In this case Latour, in his appeal to the Hobbes and Boyle as the creators of the ‘modern constitution’, is engaging in a historical exploration. It is by looking to the way science was constituted in a specific historical location that one can find out the ‘real’ way science works. This is proves problematic to Latour for two main reasons. First, this backward perspective, especially to times and cultures far removed from a contemporary scientific community, is a methodology of those same modern thinkers which Latour wishes to overthrow. Second, the use of an internal contradiction used to show the failing of the ‘Modern constitution’ is also reminiscent of a particular mode of modern theorizing.

First let us look at the problems of the use of historicity. While I am not claiming that one should not look to events which have happened in the past when working on knowledge production, the using of historicity as a basis for his analyses can be seen as problematic for Latour. Considering Latour’s text is polemical and states that the move to non-modernity is one that is now needed, the main area of historical contradiction which Latour is guilty of is not following his own prescription concerning how the non-modern’s should view/use history in their theory making. For Latour, one of the moderns’ greatest mistakes is their notion of annulling the history that preceded them yet keeping that same history artificially alive seeing only the progress or decadence of the past system.⁵⁸

⁵⁸ Latour, 1993: 133

The work of Thomas Kuhn can be taken as an example of this mistake. Kuhn's position, in short, is one where the progress of science is one of paradigms, puzzle solving, and scientific revolutions. Once the scientists have solved as many of the puzzles that are available within any given scientific paradigm, what is left, the unsolvable anomalies, have piled up and shown the non-stability of the current paradigm. What happens then is a violent period of scientific revolution where the older scientific paradigm is replaced with a new paradigm which is full of new puzzles to be solved. After this revelation, the scientific work, puzzle solving, and apparatus are incommensurable with that which has come before. It is cut off from the previous paradigm. Yet the work of the prior paradigm is not just forgotten, the ousted paradigm is kept artificially alive. For instance, though the paradigm of Newtonian physics was overthrown by a physics of relativity, Newtonian physics is still used as the starting place for students of physics to begin their understanding. Though no scientists use Newtonian physics, it is kept alive as a learning tool. Science progresses from one paradigm to another in order to keep the puzzle solving occurring in scientific research continuing.

The question then is 'does Latour recreate this same activity in his analyses of modernity?' It seems as though he does. In *We Have Never Been Modern* the methodology used in describing the non-modern world as opposed to a modern world is intimately tied up with the constitution which was set forth in its early form by the work of Hobbes and Locke which arises out of a discussion which is no longer deemed important by scientists today. Experimental life has been deduced and yet Latour continues to use, by his standards, a faulty modernist approach to the whole question of how does science work. Latour looks back into an artificially living history filled with

scientists whose work in the past is used to define contemporary science; i.e. the analyses and positing of the scientific and political works of Hobbes and Boyle as the basis for what is deemed to be the 'modern constitution'. One should wonder, by Latour's own claims, if a view of science and theory-building which is based upon the work of scientists of the beginning of the modern era can be useful in describing the nature of the work of contemporary scientists. Any attempt to do so would be using a history which should be forgotten, a history which Latour applauds the pre-moderns of ignoring, should be considered a reinstatement of a modern position. By using the works of Hobbes and Boyle, Latour walks dangerously close to a line which he himself has created and stated should not be crossed. He is himself calling upon a history which, according to his own theorizing, should be forgotten. In short, if one would want to take Latour to task concerning the value of history in a conception of sociology of science, Latour would fail in regards to his own criteria

Let us now look at the second of my concerns for Latour and modernity, the use of internal contradiction. The general form of Latour argument concerning the failing of the modern world is as follows. There was at a certain historical moment a creation of a 'modern constitution' that would be used to govern the way in which knowledge production is to be done. Within this 'modern constitution' there is a conceptual tension at the very basic level which here, in the 20th century Western world, is beginning to cause the entire 'modern constitution' to fail. Latour then advocates an alternate approach which, while reminiscent of a past mode of relating (pre-modernism), is an improvement over both the modernity and pre-modernity.

This looks suspiciously similar to the general framework of Marx, a modern theorist who Latour claims he is actively trying to overthrow. First, for Marx there is a basic contradiction within the capitalist state: the production of a surplus capital created by labor which those who labored have no access to. This is, to Marx, one of the most defining characteristics of the capitalist state and the reason which the state is going to fall. The proletariat will gradually become aware of this tension and, given time, will rebel thus destroying the system. One has merely to replace the capitalist state with the 'modern constitution', the tension between capital and the laborers of production with the tension between the process of purification and the process of translation, and the self awareness of a rebelling proletariat with a modern knowledge producers and what you have is Latour.⁵⁹ Even the use of the pre-moderns (primitive communism) as comparable and yet deficient in its amount of production to the production of knowledge claims made by the moderns (capitalists) and non-moderns (socialists/communists) feels like Marx. This use of the Marxist contradiction, a decidedly modern mode of thinking, makes Latour's claim for non-modernity to be shaky at best. Instead of escaping modernity into the realm of non-modernity, Latour is in fact showing that he, like Marx, is actually a modern thinker. Latour is entrenched in the discourse of modernity and his tacit use of the modern thinker Marx keeps Latour firmly within the grasp of modernity.

⁵⁹ While Latour does speak about the problems of 'revolution' and how his non-modern brethren would not follow such a path, one has to wonder if this is merely an empty claim unsuccessfully defending a problematic position in the text. This is the same as using a disclaimer before one states something so that they may state whatever claim while, supposedly, avoiding any problems that may arise.

One could note, in his defense, that Latour may be using Marxism as a tool to show the prize of non-modernism.⁶⁰ Or that Latour may be using the master's tools to take apart the master's house, that he must use modernity itself to pull modernity apart. But if we are to believe Hegel's description of dialectics we see that Latour cannot escape from modernity with such a move. In the negation/synthesis of a thesis by an antithesis, both the thesis and antithesis are also retained. Modernity can not be escaped by a move into non-modernity. By trying to negate modernity Latour is ensuring the continuance of it. Not only is modernity adhered to via Marx's notion of contradiction, but even the concepts of nature and culture resolving their tension in the study of hybrids seems reminiscent of Hegel's dialectic.⁶¹

But what does this potential tacit modernity mean for Latour? First I think that this problem is only a problem if Latour is seriously concerned about separating himself from modernity, an enterprise which he fails to complete. This is also an enterprise which I think is the least important aspect of his text. Though he does not removed himself completely from the grips of (post)modernity, Latour does offer a convincing critique of the state of modernity and post-modernity as they stand today as well as alluring vision as to what the next goal of theorizing should be; i.e. the becoming better parents of the hybrids which societies are busy creating.

⁶⁰ It might be helpful to keep in mind the following Zen Buddhists saying: 'when someone points to the moon, look at where they are pointing, the moon, and not at the finger that is pointing'. Perhaps one are to just supposed look at the notion of non-moderns not paying attention to the tools used to give direction other than to see the direction one should be looking.

Conclusion

Latour's *We Have Never Been Modern* is dancing on the line of modernity. His project to show the failing of the 'modern constitution' to an audience that is enmeshed in the language structures of a modern world weaves close to the line of abandoning his self-proclaimed non-modernity for the methodology of the modern mode of knowledge production.⁶² It seems that Latour is safe from the claims of Bloor and Elam that state he has crossed this line either by revisiting what Latour's position is on the co-production of 'Nature' and 'Culture', and the relationship between pre-moderns and non-moderns or by extending the theorizing which Latour has performed in directions which he, for one reason or another, did not venture into.

Yet for all of Latour's avoidance of some of the pitfalls inherent in waling this line, he does seem to fall to others, namely his use of historicism and Marxist contradiction. These two methodological positions seem to hold Latour in within the grasp of modernity.

All in all, Latour's account does give one an interesting insight into the framework which theorists hang their work upon. If one is not concerned about the potential overlapping of Latour into Marxist theoretical positions, Latour's theories can be used to provide the groundwork for analyzing the roles of hybrids which are proliferating non-stop in contemporary society. By adding the concerns of postcolonial theory to Latour's framework a deeper understanding can be attained of what it means to

⁶¹ Even the nature/culture concern is addressed

⁶² One Marxist claim is the greatness of the modes of production inherent in the capitalist state.

be Western/non-Western, modern/pre-modern/post-modern/non-modern, or even scientific/non-scientific. Taking Hegel's dialectic to levels which Hegel himself would not, a greater insight into the meaning and world-view constructed by ever growing networks of hybrids becomes possible. In exploring these networks and how it is that humanity fits within, greater understanding is sure to be reached

Bibliography

- Bloor, David *Anti-Latour* Studies in the History and Philosophy of Science Vol. 30 No.1
1999 Pages 81-112
- Cohen, Sande *Science Studies and Language Suppression- A critique of Bruno Latour's
We Have Never Been Modern* Studies in History and the Philosophy of Science,
Vol.28 No. 2 1997 Pages 339-361
- Elam, Mark *Living Dangerously with Bruno Latour in a Hybrid World* Theory, Culture
& Society Vol. 16 No. 4 1999 Pages 1-24
- Gould, Stephen Jay *The Mismeasure of Man* Norton Press, 1996
- Haraway, Donna *Modest_Witness@Second_Millennium.FemaleMan_Meets_OncoMouse*
Routledge Press 1997
- Latour, Bruno *We Have Never Been Modern* Harvard University Press 1993
- _____. *Science in Action: How to Follow Scientists and Engineers Through
Society.* Milton Kynes: Open University Press 1987
- Lewontin, Richard *The Triple Helix: Gene, Organism, and Environment* Harvard
University Press, 2000
- Lowe, Lisa *Immigrant Acts: On Asian American Cultural Politics* Duke university Press
1996
- Lutz, Helma *The Limits of European-ness: Immigrant Women in Fortress Europe*
Feminist Review No.57 Autumn 1997 pages 93-110
- Shapin, Steven, and Schaffer, Steven *Leviathan and the Air Pump: Hobbes, Boyle and
the Experimental Life* Princeton University Press 1985
- Terry, Jennifer, and Urla, Jacqueline *Deviant Bodies* Indiana University Press, 1995
pages 19-49