Going in and out of each other's bodies¹.

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In memory of Skip Rappaport.

Durkheim's work has always been criticised for his reifying of the social and situating it in an indeterminate zone between actors consciousness and positive facts. However, in this chapter, I am not concerned with arguing whether this criticism of the founder of French sociology's work is justified. My purpose is to show that it is possible to maintain some aspects of his conclusions about the nature of religion and of the social with quite different types of arguments to those he employed. My framework here is that of modern evolutionary natural science and our recent understandings of the specificities of the human mind/brain

Such an evolutionist posture tends to make social/cultural anthropologists most uncomfortable, although I hope that, as they read on and overcome their distaste, they find that an evolutionist perspective does not necessary lead to the dangers which they fear from such a stance and that it can even be reconciled with some of their most cherished ideas, which will thereby emerge as strengthened.

But since one might as well hang for a sheep as for a lamb, I begin my argument much further back than is usual in evolutionary anthropology with a consideration of the very earliest stages of life on earth, when unicellular organisms associated together to form multi cellular units in the Cambrian era.

During this crucial transition, and for millions of years, it was far from clear whether those early multi cellular organisms were one or many since they were in an in between stage. This biological conundrum still exists in varying ways and to varying degrees, for many subsequent and more complex forms of life. An extreme example would be coral, about which one can argue equally plausibly, that the minute units of which it consists are separate organisms, or that whole coral branches, or even whole reefs, are one single animal.

The difficulty does not only apply for such exceptional life forms or when we try to isolate the "individual". The problem of the unit, or level, on which natural selection acts, is a difficult issue for all living things and it has become particularly acute in modern biology. Does natural selection occur at the gene level?, or on combinations of associated genes? or at the level of the individual?, or on a larger group which shares genes in differing degrees (Stotz, & Griffiths, 2004).

This sort of question is particularly problematic when we are dealing with social species. Is it the bee or the hive which is the animal? After all, the bees in a hive are as genetically identical as are the different bits of our human body, and a hive possesses only one set of working reproductive organs.

The biological problems do not end there. When does an embryo become separate from its mother? Is a live spermatozoid a unit. More generally, how far are parents one with their children, and are descendants of individuals their continuation or a new unit? Are descent groups one body? Do members of one caste have unique distinctive types of blood? Are nations one people? Are we all the *children* of God in the *brotherhood* of Christ. Is society, as Durkheim claimed, more than the sum of the constituent individuals?

Here, those readers who have already given me up as some sort of biological reductionist, indifferent to the higher purpose of cultural anthropology, might summon a flicker of interest with these more familiar disciplinary questions. They may even begin to hope that I might have something to say about religion and ritual, which, after all, is what this book is about. I shall get there....eventually. And, indeed, my prime purpose in this chapter is to consider the theoretical implications of the way I have just managed to *slither* from a discussion of the structure of coral to hoary classical subjects in anthropology and even to central tenets of some versions of the Christian Religion.

But if, the reader is totally unsympathetic to the approach I propose they will already have revelled in identifying a familiar slight of hand. Representing facts about the world as if they were just that, without having first recited the anthropologists' exorcism prayer: "*I humbly acknowledge that every thing I say is nothing but an epiphenomenon of my present cultural position and time and that this inevitably leads me to essentialising a particular cultural position and then mercilessly imposing it on defenceless people"*. In other words, I have been guilty of suggesting that *my* scientific knowledge, a mere elitist manifestation of my own culture, is somehow the basis of the propositions made by those people around the world who say things like: "The members of our group, which has existed since the beginning of time, share a distinctive type of bone" or "Our lineage consists of one body" or "Initiation reunites us with our ancestors" or "Ask not for whom the bell tolls; it tolls for thee.".

I would have thus committed all the category mistakes in the book. Especially, in having forgotten the fact that the cultural creates an impenetrable screen between what is and our

cultural representations. Of course these familiar arguments are partly justified¹, perhaps as first steps when we teach an introduction to anthropology, but in this chapter I argue that when left in categorical form, they, too, are just as misleading as the ethnocentricism which anthropologists love to denounce.

We may start with a classic and familiar polemic as a way to introduce the basis of the theoretical position I shall adopt below.

In the bad old days, so the story goes, anthropologists used to think that kinship was based on the fact that people go in and out of each other's bodies. Indeed, they might have stressed that the physical separation from mothers takes quite a while, with intermediate phases such as breast feeding and child care. Some of these earlier vulgar anthropologists went so far as to suggest that the care given by fathers to infants was somehow the consequence of having gone into the mother during sexual intercourse. They argued that these "natural" foundations were the common base of all different kinship systems (Collier and Rosaldo 1987: p.31ff.)

Such naivety, however, was soon to be severely disciplined by developments in our subject. This was done, first of all, by people who stressed the old platonic point that humans (I don't see why this does not apply to other animals too) do not live in the world as God, or the scientists, see it, but *via* their understanding of it, and that therefore *the foundation, i.e.* going in and out of each other's body, is not directly any such thing for social knowledge. This correction was, however, soon deemed not to have been severe enough. It was not simply that people saw the world "through a glass darkly" it was that they did not see it at all. There

¹ They are what would be used to dismiss as irrelevant studies such as those of Cosmides and Tooby (1992) about cheater detection .

was no such *fact* as that people went in and out each other's bodies, these were just accidental cultural representations of which my particular formulation is only one among many. Thus, to talk of different, culturally constructed, kinship systems as though these were cultural interpretations of a single reality was a fallacy. David Schneider in a wonderful metaphor explained that if you went out into the world with a kinship shaped cutting tool you, of course, got kinship shaped pieces, by this he imlied that if the tool had had any other shape than the western shaped kinship tool, which would be the case with the tools used by the "others", the shape you would have then got would then be quite different(Schneider 1984: 198).

I have always liked this metaphor of Schneider's because, as a child, I used to spend much time watching my grandmother making biscuits. She would roll out a large even pancake of dough on the marble of the kitchen table and, with a few ancient tin tools, she would cut out various shapes. This is exactly what Schneider has in mind. But the other reason why I like his metaphor, is that what is wrong with it is also obvious. The world in which people go out of each other, the denounced *foundation*, is not, as suggested by Schneider's analogy, inert, undifferentiated and evenly flat, like biscuit dough. And because of its shape, although this does not determine the way it will be represented, severely restricts what is likely. Plato used another culinary metaphor. For him the world was more like a roast chicken than pastry, and, unless you really wanted to make things difficult for yourself, you would "carve it at the joints", wherever these occurred on the animal you were serving up.

Indeed, it is the dialectic between the facts of sex and birth and the cultural representations of these phenomena which promise to advance our understanding of the nature of human beings, which of course also involves the cultural, and hence historical aspect. But this examination is what the Schneiderian rhetoric makes impossible by refusing to allow us to ask what the representations "are about" what the world is like and, instead, replacing consideration by a trivial point about the fact that different languages will probably not all have a word for what anthropologists call "kinship".

And there is yet something else that is obscured by Schneider's figure of speech. The cutting tools, which represent concepts in the metaphor, also have to be explained. There is no doubt that these are the product of specific histories but they, nevertheless, have had to be usable tools by the minds of the human beings who employ them. Here the world, as it is, interacts once again in a challenging way with the representations that cultural anthropologists study. It is merely banal to stress that the world we live in is culturally constructed, what is of interest is the indirect relation of the construction with what is constructed and how the construction is used.

This chapter, however, is not going to advance on the implications of the link between the fact that we go in and out of each other's body in birth and sex and the cultural representations of this fact in kinship systems. Many, though I would not include myself among them, may feel that this topic has grown tiresome. I merely evoke the controversy to stress that, since all cultures interpret, and have to interpret, the fact that we go in and out of each other in sex and birth, they also have to interpret the consequent fact that for us, as is the case with coral, there is indeterminacy concerning the physical boundaries of individuals. The so-called "descent theorists" of my anthropological youth were fascinated with groups of people who declare themselves to be "one body", in other words corporate groups. These statements are so interesting, not because they are flights of fancy, but because they are in

part motivated by the real fact of the indeterminacy and arbitrariness of the boundaries of biological units.

My focus in this chapter, however, concerns another real fact about human beings which although different from kinship matters is not altogether unrelated. This indeterminacy is not simply a result of the sexual character of our species and the way it reproduces itself. It is also due to another feature of *homo sapiens*. Individuals go in and out of each other because of certain characteristics of their nervous system. This form of interpenetration is as material as sex and birth, though, unlike sex and birth, it is, by and large, unique to our species (Povinelli, D. J., Bering, J.M., & Giamborone, S. 2000; Decety & Somerville 2003).

I have already mentioned above that, although the boundaries of individual units are arbitrary among all living forms, this ambiguity takes on a special, perhaps more extreme, form in social animals, since the social, of itself, and by definition, once again connects the individuals whom time and genealogical distance is separating. Such a process occurs in a variety of ways in different life forms. This is because the mechanisms which makes the social differ according to the species concerned. So, it is not surprising that the specific basis of human sociability is a product of those capacities of our species which make it distinctive (Humphrey 2002).

One thing which normal human babies do, at around the age of twelve month, but which our nearest relatives the chimpanzees never do, is to point at things, not because they want what they designate - they do do this, but chimps do that too - but because they want the person who they are with to adjust their minds in harmony with theirs, in other words, they want the person who they are with to pay attention to the same thing as them, in other words to share

intentionality (Gopnik 1993, Tomasello, M. and H. Rakoczy 2003, Tomasello 1999). This demonstrative pointing is one of the first stages of the development of that unique and probably most important of human capacity: the ability to "read" the mind of others, a capacity which is somewhat oddly referred to as "theory of mind" or TOM for short. This ability continues to develop from the age of twelve month on until it is mature, perhaps around four, when one can show that the child "knows" that other people act, not in terms of how the world is, but in terms of these other people's beliefs or concepts (Wimmer & Perner: 1983). By "know", I simply mean here, that the child and, of course, the adult, acts in terms of their reading of the beliefs of *alter* and is continually adjusting her behaviour accordingly. I do not mean that the person who does this is necessarily conscious of the process, a point to which I shall return in a moment. The whole process is going on in a far too complex and too rapid a way for that to be possible. Nonetheless, the importance of TOM can hardly be overestimated. Those of you familiar with Gricean theories of linguistic pragmatics will realise that it can be argued, convincingly for me, that this continual mind reading is what makes linguistic communication, and indeed all complex human communication, possible (Sperber & Wilson 1986).

It would be legitimate to think that to talk of the mutual mind reading on which our social life is based is, at best, simply a metaphor, at worst, a mystification. However, I want to stress that the metaphor refers to an empirical phenomenon of interpenetration, even though we, admittedly, don't stick our finger into each others brain, in some kind of mental intercourse.

Just how material the process of mind reading may be, has become clearer in the light of recent neurological findings. Thus many recent researchers have argued that the unique human ability to read the mind of those with whom we interact is ultimately based on a much more general, non human specific, feature of the brain: the so called "mirror neurones" (Gallese & Goldman 1998).

Perhaps the term is misleading. What is being referred to is an observation which has been made possible by modern neural imagery. By mirror neurones is meant the fact that exactly the same neurones are activated when, for example, we see someone raising their arm to point at the ceiling as when we perform the action ourselves. In other words, the action of *alter* requires from us a part of the same physiological process, the neural part, as the action of *ego*. Indeed, a moment's reflection makes us realise that, even without the arcane, and somewhat contested, biology of mirror neurones, the very nature of human communication *must* involve something like this (Decety & Somerville 2003)².

Let us consider a simple act of linguistic communication. Here I follow Sperber and Wilson's theory of relevance fairly closely (Sperber & Wilson 1986). For my message to come across when I say, for example: "Today we honour the memory of Roy Rappaport" a mechanism must occur which enables you to penetrate my brain and align yours so that its neuronal organisation resembles mine. In order to do this, you and I, have had to use a tool, sound waves in this case, but it cannot possibly be the sound waves, as such, which carried my meaning across. Sound waves, poor things, are just sound waves. The reality is that sound waves enable me to modify your brain, or mind, so that its neuronal organisation in part resembles mine, admittedly in a very limited way. And, of course, this ability to

 $^{^{2}}$ It is also important to remember the importance of sharing of emotions which is highly relevant to the argument of this paper and goes in the same direction as the evidence on TOM. It is not considered here but I hope to do so in another publication. See De Waal 1996.

communicate in this way, to connect our neurones that is, is what makes culture possible since culture must ultimately be based on the exchange of information, which, of course, then, can be combined with other information, transformed or reproduced through time and across space in a unique human way.

The paralleled neuronal modification implied by communication has further important implications. Let us assume, for the sake of argument, that it is possible for an individual to create *ex nihilo* a representation. That representation could then be said to be under her control since the process which led to it would be hers alone. However, when the representation comes from someone else's brain, which in reality is always, though to varying extent, the case, i.e. when it has come *via* the process of communication I have just described, the representation of one brain colonises another, whether this be a conscious process, or the unconscious process which is the basis of all communication. In such a case, the created neuronal activity of one brain <u>is</u> the material existing in another. Brain of different individuals are there by interpenetrating materially so that the boundaries , which we believe obvious, become problematic.

What I am saying here is very similar to what some writers, especially Ed Hutchins, have called "distributed cognition" (Hutchins 1995). However, I would distance myself from them on one minor point. Hutchins, in talking about this phenomenon, likes to refer to minds "not bounded by the skin" as though there existed some sort of extra biological process. Personally, I am too literal minded to feel comfortable with such phraseology which makes the process appear surreal. The process of interpenetration I have alluded to is straight forward and biological.

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My other difference with the distributed cognition folks is not a disagreement but rather simply that I would like to push their insights further. Hutchins is famous for his demonstration of the way the knowledge necessary to navigate a big ship is not held in the head of one person but is distributed in a group. In an action such as coping with an emergency, each individual does his job as best he can in the light of his own knowledge but in doing so he relies on others who he assumes know other bits of the knowledge necessary to navigate the ship but which he does not, and does not need, to hold himself. This is what Hutchins calls distributed cognition. For this type of reliance on the knowledge of others to be possible, the different individuals need trust. Trust that the others know what they are doing and are well intentioned. This means that people can then act on what they know is incomplete knowledge, but which they trust is completed by the knowledge held by others, to the extent of acting on that which they do not need to fully understand. It is not simply that they rely on others, they rely on others at the very moment they rely on their own knowledge.

By using that formulation I deliberately align what I am saying with the point made by a group of philosophers who, following Hilary Putman and the "deference" theorists, stress how social life is based on trust of others, basically on the default assumption, that these others with whom we are in contact, are normally competent and cooperative. In other words, because of our theory of mind adaptation, we continually interpenetrate as we communicate and also hold as true information which only makes sence because it is also contained or continuous with that in other minds. (Putman 1975, Burge 1986, Orrigi 2000). This is the nature of human cognition which is essentially social. Such a state of affairs makes it possible that the content of knowledge stored in an individual not to be understood by them, nor consciously sought to be understood, but this individual is likely to be aware of

the solidarity on which the whole system of social cognition is based and this may be greatly valued. This is a point to which I shall return.

I started this chapter by arguing that, for all living things the distinctness of the units of life is far from clear and that this is also the case for humans for the same reasons. Furthermore, I argued that, for people, this fact is commonly represented culturally in kinship systems which, in varied and specific ways, are *about* this reality. Furthermore, for social animals the problem of the blurring of individual boundaries is compounded by the very nature of their sociality. Individuals in social species are, to varying degrees, materially continuous with each other. Since humans are social animals this problem applies to them. In their case, this state of affairs is brought about by the tool which makes human sociability possible: the hard wired human capacity referred to as theory of mind. Such an assertion, however, raises the same question that I touched on in the discussion of sex and birth: What are the cultural implications, if any, of this fact? The necessity to ask this difficult question is precisely what is missing from much of the work of such evolutionists as Tooby and Cosmides and even Pappaport.

The parallel with kinship may advance the argument but at the same time it highlights an obvious difficulty. When anthropologists are studying kinship systems they are studying representations of phenomena having to do with obvious empirical processes, of which no one can be unaware: going in and out of each other's bodies. When we are dealing with the interpenetrations of minds, however, we are dealing with phenomena not so easily consciously perceived. Rather, the continual mutual reading of minds on which

communication depends is like grammar, which is, and has to be, unconscious, if only to operate at the necessary speed. If that is so, how is it possible that an *awareness* of this process could occur, a necessary step for it to take explicit form in cultural representations? As a way to approach this question I shall ask the reader to accompany me on a detour, away from purely theoretical considerations, towards a brief description of a particular case.

About a year ago, I decided to do, what was, for me at least, a new type of field research in the remote Malagasy forest village where I have been working, on and off for the last thirty years. There I carried out what is probably the most typical experiment used to demonstrate the development of children's understanding of TOM in front of whoever was available at the time; I then asked the adults watching to make sense of what they had just seen. In other words, I placed my informants in the place that professional psychologists normally find themselves in in the lab so that they, like them, would give me *their* interpretation of what was going on. The experiment in question is usually called the "false belief task". In the version I used, I showed a child two hats and, in front of them, and everyone present, I placed sweets under one of them. I then asked a member of the audience to leave the house and, showing the child what I was doing, I switched the treasure from under one hat, to place it under the other. I then asked the child -that is the key question - under which hat the person who had just gone out of the room would look for the sweets when they returned. The results in the Malagasy village were, as expected, much the same as those reported from all over the world. Children under the age of four say that the person who left the room will look under the hat where the sweets actually are, while older children say that the person will look under the hat where she saw them put, but where, of course, they were not. This difference is usually interpreted by psychologists to mean that the younger child has not yet understood, subconsciously that is, that other people do not necessarily know what they

know, or to put it more theoretically and somewhat differently, that people act in terms of their, possibly false, beliefs, not in terms of what the world is actually like.

The adult Malagasy villagers interpretation of the experiment was not all that different to that of professional cognitive psychologists. After a bit of prodding and reflection, the commonest explanation was that younger children have not yet learnt to lie and, therefore, they do not understand that other people can lie also. For reasons which I cannot go into here, I take this to mean that the younger child is represented by them as a naïve empiricist, while they believe the older children and adults know that people can deceive and therefore look for the communicative *intention* of the speaker, since they do not simply trust appearances which could be manipulated by people.

I then used the discussion of the results of this experiment, which had just been conducted in front of the villagers present, as a springboard for a more general discussion about the nature of thought. During these continuation discussions, it was explained to me by the villagers that thought was an activity through which one matched one's action to one's purpose. Thought, they reasoned, is thus a feature of all animals: fleas, for example, also think, since they hide in order not to get caught. Humans, however, are superior to other animals in that they have an extra tool: language, which enables them to achieve the purpose of their thought more efficiently especially through, indirectness and deceit.

When I consider the very detailed information, on mind, on thought and on cognitive development which I obtained through this work from the largely unschooled Malagasy in this remote village, I am, above all, struck by the familiarity of the ideas they expressed and their similarity with our own folk view. I am also struck by the correspondence of their

views with those of the psychologists. And, indeed, when I look at the few other ethnographic studies of folk theories of mind and thought we possess, I find this general family likeness again and again (Gubser 1965, Rosaldo 1980ⁱⁱ).

These similarities inevitably raise the question as to what causes these recurrences. The obvious answer would be that they are triggered by an awareness of the same actual universal human cognitive process. This explanation, however, runs into the difficulty discussed above, that mental processes, such as the workings of mind operate below the level of consciousness while, what I was told in the discussions which followed the experiments was clearly explicit and conscious.

But is this difficulty as serious as it seems? Or, to put it another way, following the arguments of a number of cognitive scientists (Jackendorf 1994: Part 4. Block 1990, Humphrey 2000), is the barrier between the conscious and the subconscious so impenetrable as the objection suggests? The comparison with grammar, alluded to above, suggests otherwise. When we speak or comprehend others, clearly we do not consciously obey grammatical rules, nevertheless we can *become* aware of the existence of such rules when, for example, somebody makes a "grammatical" mistake. Indeed, it is probably as a result of such "mistakes", that folk grammarians, the world over, are able to build their theories. Although these folk grammatical theories vary probably because of a great variety of historical and cultural factors, it would surely be perverse not to accept also that their obvious similarities is caused by the way grammar actually works, and that this can, thus, to a degree, be accessed.

The situation with theory of mind is probably similar, perhaps also based on reflection caused by cases of faulty or difficult communication. For example, much of the general speculation about the nature of mind and thought in the data I collected was linked to explicit reflection on the abilities and limitations of a deaf and dumb man who lived in the village. It seems that the same kind of continual attempt to understand the psychology of thought and communication as was caused by my experiment is also caused in a similar way by this sort of more familiar, less artificial, more recurrent, events. This is probably why, once the initial resistance overcome, people were so willing, enthusiastic even, in engaging in the discussion of the experiment I had demonstrated. The intellectual challenge it presented was not, after all as unusual or bizarre, as it might at first seem from the outside. Of course, this more ordinary speculation was not done in the jargon of modern psychology, but with the cultural tools available. But even these unsophisticated tools and vocabulary must have been developed in relation to the psychological processes which actually occur and are known to occur. It is not surprising, therefore, that similar ideas and representations should crop up, again and again, in different cultural and historical contexts. In claiming that, I am not arguing for any direct determinism between the actual working of the mind and people's theories about it. Many other factors are clearly involved in each case. Understanding and representing the working of the mind is difficult for the Malagasy, as indeed it is for any psychologist, it involves peeping past barriers of many kinds, by means of thought or practical experiments, but both parties do this and for neither party is this completely impossible.

To illustrate such complexity, and to begin to approach the subject of religion and ritual, which the reader may have good reason to believe I have forgotten all about, I return to my Malagasy example.

When people so emphatically insisted that thought always, directly or indirectly, was a matter of matching ends and means, I was naturally led to ask about dreams. Were these not a case of thought without a practical end in view? The commonest answer I was given to such a question was negative. Dreams, I was assured, were cases of other people entering you and thinking *through* you in order to achieve their ends. In this way, the local general cognitive theory was made coherent with a theory of interpenetration with which I had been familiar when I studied Malagasy ancestor worship, since, it is through dreams that ancestors manifest themselves most typically and it is through dreams that they make their desires known. This theory of dreams, however, is radically different from what is found in many other cultures, including, of course, that of professional psychologists.

This, however, does not mean that, as soon as we touch on phenomena which are usually labelled religious, we inevitably move away completely from concerns cognate with those of professional cognitive science. The idea that dreams are really other people, especially ancestors, thinking through you for their own ends, is part of that much more general idea that previous generations, dead forebears, living elders or absent members of the family are speaking through you, as you consciously, or unconsciously, "quote" them. Thus, you should utter the words of other wise people because you trust and rely on them. Or, rather, these forebears are continually acting through you. Indeed, to allow that to happen willingly is to show respect and to act morally. Morality is thus experienced, less as a matter of individual choice, and more as one of submission and recognition of the presence of others who penetrate you. But, as soon as we rephrase the Malagasy concept of ancestors in this way, more ethnographically accurately I believe, we find that we have been brought back into the familiar territory of the scientific theories of distributed cognition and deference theory to

which I referred to above. In the very area in which my Malagasy co-villagers could be represented as most exotic, in their beliefs in the power of ancestors, we find them very close to Hutchins and Putman. Even the belief in the penetration of the young by elders and ancestors turns out to be built on the implicit realisation of the reality of the effect of the interpenetration made possible by TOM- that is on the fact that knowledge is distributed.

The point I want to stress is that the operation of theory of mind and of the nature of the distribution of knowledge in society is neither unknown, nor fully known, by the Malagasy villagers. Furthermore, they are aware of the unsatisfactory partial nature of their knowledge, something which was often commented upon by them after the experiments. And, as a result of their realisation of the incompleteness of their knowledge, when the chance arises, as when I showed them the false belief task, or when they observed the deaf and dumb man, they eagerly seize the opportunity to find out more about the mental processes of their own minds and those of others. In that inquisitiveness they are no different to professional scientists and, like them, their knowledge is incomplete, but like them they are also *straining* to know more about a reality which, in the case of psychological processes, is common to all human beings and is partly accessible. Of course, as in the case of the scientists, but probably to a greater extent, there are also many other factors which interact with their theoretical speculation and representations and this multiplicity of factors produces systems which are only partly scientifically motivated. However, it is the commonality of the enterprises and the reality of the world they engage with which explains the continuity of the scientific discussion of such things as theory of mind and of the cultural representations of largely unschooled Malagasy villagers and western scientissts.

The bodily interpenetration of TOM is thus, to a certain degree, known by people such as Malagasy villagers and this knowledge combines in varying ways and in varying contexts with other types of knowledge. This element, therefore, not only leads to partial continuities between scientific and folk understandings of the interpenetration of individuals and of the consequent provisionality of levels of individuation. It is to these that I now turn.

A central implication of TOM is that all social relation implies interpenetration and, therefore, the arbitrariness of boundaries within the social fabric applies, not just to people who are related, but between all human beings who are in contact. The awareness of, this therefore, ensures that the ideologies of individualism are always, to varying degrees, negated by ideologies based on the realisation of interconnection, as Mauss stressed in the essay on the gift. (Mauss 1923-24).

Knowledge of interpenetration and of lack of clear boundaries, as well as the emotions which are an integral element of the way this is experienced, is what we mean by that most Durkheimian of words: solidarity. The presence of this sort of sentiment, at its most general, is one which is difficult to put one's finger on, because it seems rarely made explicit or the subject of reflexive discourse. However, from my reading of ethnography and from my own experience, it would seem that in most cultures, a very common default assumption is that there is a potential moral obligation to any stranger who one might come in touch with or, to put it in a different way, that the very fact of entering into a relationship implies being consubstantial and therefore morally obligated. Perhaps the most familiar manifestation of this phenomenon is the obligation of hospitality towards strangers, a moral imperative which recurs, admittedly in different forms, in so many unrelated cultures but which, as far as I

know, has been little theorised at a comparative level by modern anthropologists. A general unspecific morality is thus probably an epiphenomenon of the very nature of human communication

There are, however, many instances of much more specific and elaborate awarenesses of the lack of boundary between individuals. Many of these seem to fall in the general area which is usually labelled as religion, though some of these are of a less amiable and more threatening form. I have already mentioned the Malagasy interpretation of dreams and its link with ancestor worship, which, in a variety of forms is found all over the world and which is so often linked to the lack of bodily differentiation within descent groups. Another example is witchcraft like ideas, these often take the form of a belief in the secret and evil penetration of a consuming other within one's body made possible by the existence of communication. More obvious perhaps, are the beliefs in spirit possession which seem to crop up all over the world. These involve the total invasion and replacement of one individual's intentional mind by that of another. These are a kind of extreme representation of the colonising nature of social relations.

In a somewhat different way, the realisation of the interpenetration of individuals and therefore, the context dependence of boundaries seems present in many political movements and religions. This idea of a corporal unity beyond the individual is well documented in certain forms of Christianity, Islam and devotional Hinduism. These emphasise a different "brotherhood", as an alternative to the interpenetration of sex and birth, thereby, at the same time, emphasising the comparability of the two types of interpenetrations, as well as using one to challenge the other. These ideas become most explicit in the mystical forms of these religions, for example in Sufism or devotional

Hinduism, where the theme of the interpenetration of the bodies of the devotees and the lack of boundaries of their bodies takes extreme and dramatic form.

Perhaps, however, it is in ritual that the conscious and culturally encoded awareness of lack of boundedness is clearest. This, of course, was one of Durkheim's central points, but what he stressed was the effervescence of highly dramatic rituals. There is no doubt that in many of the manifestations which we would label as ritual a feeling of transcendence of individuality and even of dissolution of self into a greater whole occurs. Furthermore, this may well be part of the realisation of the empirical lack of boundary of human individuals. However, many rituals are simply not like that. A universal feature of ritual however is deference, if only because it is at the very core of the meaning of the word in English. Deference is, as noted above, the accepting of the content of other minds without necessarily knowing the whys and wherefores of the propositions and actions one performs oneself. As argued in different ways by Putman, Burge and Hutchins it is characteristic of knowledge in society and implies cognitive interpenetration. Ritual is an extreme case. In ritual one accepts that the motivation for meaning is to be found in others one trusts (Bloch 2004.) In other words, it is not only that one surrenders one's intentionality to others but also that one is aware of this happening. The recourse to ritual is therefore not only to be understood as recognition of neural interpenetration, a submission to other minds but also as a celebration of this awareness.

Of course, these religious and ritual representations are not simply realisations of the fact that we interpenetrate each other as we interact and that, therefore, the boundaries separating individuals are provisional and alterable. In each and every case much more is involved, which may indeed be more important. I am simply saying that the fact of the social, sexual

and reproductive characteristics of the human species means that we go in and out of each other's bodies in at least three different ways and that this implies an indeterminacy of the level of relevant differentiation.

In the case of birth and sex the interpenetration is inevitably, though variously, cognised. In the case of TOM the matter is more complicated. The working of TOM is normally below consciousness and therefore so is the interpenetration it involves. However, since the boundary between the conscious and the subconscious is not sharp and because we have tools to traverse it, such as experiments, or the existence of deaf and dumb relatives, we are able to use our hazy awareness of the process to interpret and speculate about such phenomena as dreams, the relation with ancestors, and many other central aspects of human life. This knowledge- the raw material of interpenetration- becomes a resource and an idiom which may become central in many representations which we would label as moral or religious or ritual. It is this line of causation from the fact of interpenetration to its conscious representations by difrent people in different ways which makes possible the *slither* from the biological to the cultural, including the religious.

This causal chain outlined above centrally involves a direct connection between the social, the moral, the religious and ritual, such an argument is inevitably reminiscent of the theories of Durkheim alluded to at the beginning of this chapter. After all, his central theory in <u>The elementary forms of the Religious Life</u> is that religion, by means of ritual. is a projection of the intuition of the dependence of the individual on society, and of the individual's incompleteness- an intuition which leads, therefore, to the impression of the presence of a superior transcendental element, the religious (Durkheim 1912).

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My admiration for this great anthropologist cannot but be heightened by the similarity of our arguments. Much of what I have said is what he said long ago, though from a totally different epistemological base. Thus, it is also essential to stress the profound difference between my argument and his, if only to clarify the status of what I have been arguing.

Unlike him, I am not proposing, in any way, a general theory of "religion"; like most modern anthropologists I do not believe that the term religion has any general analytical value. Seeking the essence of religion would, therefore, inevitably run into the circularity which Durkheim's book demonstrates. In any case, the awareness of the provisional nature of individual boundaries occurs in many kinds of cultural representations which could never reasonably be called religious. For the same reason, I am not arguing that the interpenetrations of kinship and TOM are the *origin* of the religious, any such claim would be meaningless, since for me what we call religion in anthropology is merely a rag bag of loosely connected elements without a core.

Most importantly, however, I differ from Durkheim in his understanding of causation. For him the social, which comes from we know not where, mysteriously causes the cultural, and the empiricalwhich is about its own mystery, which then gives us the tools to invent what is, irrespective of what the world is like. This idealist fantasy would only be worth elaborating as an example of a quaint archaic conceit if it did not actually, I believe, still resemble much contemporary anthropological theorising.

What I am proposing is more straightforward, more modest, more materialist, and anchored in evolutionary theory. The source of the social is to be found in the cognitive capacities of humans, though, of course, the evolutionary line of causation between the social and the

cognitive is not unidirectional but rather, as argued by Humphrey and Tomasello, a single process. This socio/cognitive, means that, even more than is the case for non social animals, and differently than is the case for other social animals, the boundaries between individuals are, at best partial. This fact and our consequent bodily connectedness, which supplements, and sometimes competes with the connectedness of kinship, is fuzzily available to our consciousness. It is this awareness which becomes a recurrent element in a great variety of representations in different cultures, representations which must not forget are different kinds of phenomenon from the simply psychological. But it is these awarenesses which Durkheim examined under the label "solidarity". And, furthermore, the types of solidarities he identified are often, though not always as he also stressed, manifest in what we call religion and ritual.

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ⁱ An earlier version of this was given to the American Association fro the Anthropology of Religion as a Rappoport lecture. I would like to thank R. Astuti, E. Keller, G. Orrigi A. Yengoyan and D. Sperber for comments on an earler version.

ⁱⁱ Rosaldo's book in fact emphasises exotic character of Ilongot psychology but I am struck that in matters of cognition, at least their conceptualisation is very familiar.