The Social Ontology of Persons

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Persons are biological beings who participate in social environments. Is human sociality different from that of insects? Is human sociality different from that of a computer or robot with elaborate rules for social interaction in its program memory? What is the relationship between the biology of humans and the sociality of persons? I argue that persons constitute an emergent ontological level that develops out of the biological and psychological realm, but that is largely social in its own constitution. This requires a characterization of the relationships between the bio/psychological and the social, and of the developmental process of emergence. It also requires a framework for modeling the bio/psychological level that makes any such emergence possible. Neither attachment theory nor information processing frameworks, for example, will do — the major orientations toward human sociality today make understanding that sociality ultimately impossible. Only an action framework, such as that of Peirce or Piaget², suffices.

The discussion proceeds in three general phases: 1) a model of the emergence of social reality, including language, in particular kinds of interaction relations among people, and 2) a model of the sense in which *persons* emerge in individual development as infants, toddlers, and children come to be able to participate in these social realities. The sense in which persons constitute a largely social emergent relative to the biological individual — even extending to the largely social constitution of fundamental issues of normativity and values in life — is a central theme of the discussion. Finally, 3) the dependence of the analysis on an underlying pragmatic or action framework is highlighted: contemporary alternative frameworks for modeling development cannot satisfactorily address these issues of the social constitution of persons.

Inherent Human Sociality: Adaptation to Adaptability

What is it that makes human beings so deeply social? Human beings are highly adapted to some physical specializations, such as tasks involving opposable thumbs and long distance running, but, above all else, they are adapted to niches requiring adaptability. The ability to handle novelty and complexity, especially temporal complexity, far exceeds that of any other species (Bickhard, 1973/1980, 1992). I have argued that the macroevolutionary sequence of interactive knowing, learning, emotions, and consciousness, of which *Homo sapiens* is the beneficiary, is a sequence of increasing adaptability, increasing

ability to handle novelty and complexity (Bickhard, 1973/1980; Campbell & Bickhard, 1986; Bickhard & D. T. Campbell, in press).

A significant reason for this adaptation to adaptability is likely to be the evolution via positive feedback of social complexity in the origins of the species. As social groups became more complex, the threshold for individuals being able to participate sufficiently to be able to reproduce was increased accordingly. This would raise the level of complexity in future generations, thus increasing the threshold for being able to handle social complexity even further, and so on (Humphrey, 1976; Goody, 1995). Note that the complexity of sociality is in strong part a temporal complexity, a complexity of the temporal flow of social processes and interactions.

In being able to process such complexity, human beings simultaneously offer the potentialities of such complexity to each other. The exercise of these abilities can nowhere be so directly encountered as in interactions with others also capable of such complexity — in social interactions. At the core of whatever other advantages are to be derived from human sociality, such as hunting prowess or gathering organization and wisdom, humans are intrinsically social in offering and appreciating the complexity of sociality that only their own species can afford.

The Emergence of Social Reality: Situation Conventions and Language

The potential for interactive complexity that human beings afford to each other creates a special epistemological problem — how to characterize social situations. A general solution to this problem of characterization, which I call a situation convention, constitutes the basic form of the emergence of social reality out of individual psychology. It is in coming to be able to co-constitutively participate in situation conventions that human beings come to have a social ontology.

In preview, situation conventions constitute a kind of "common understanding" of what the social situation is, and this common understanding constitutes an emergence of a higher level of ontology. Language develops as a system of operators on such social realities, thereby greatly complexifying those realities: once language has emerged, much of social reality is constituted in potentialities for further language interactions. Such language-generated complexities, however, are elaborations on initial social realities that are not themselves linguistic.

What is the special epistemological problem that humans, and other agents, constitute for each other? A visual scan of a rock is highly informative about what kinds of interactions would be possible with the rock. Rocks are not capable of particularly complex potentialities of interaction. A visual scan of a person, in contrast, leaves open a vast range of interactive possibilities: Is she friend or foe? Is he angry or fearful or happy? Is this an honest person? And so on. The interactive character of a situation involving another person depends strongly on properties and states of that person that are at best only partially discernible.

The complexity of this epistemological problem is greatly enhanced by the fact that the interactive potentialities afforded by another person depend strongly on how that second person construes the interactive potentialities of the first person. If I know that you think that I am angry at you, even if I am not, that has a high relevance to the interactive characterization of the situation involving the two of us. And the same kind of point holds for you with respect to me. The potentialities afforded by the other are in turn dependent upon that other's characterization of the potentialities of the first individual — whose potentialities, in turn again, are dependent on how the other is construed. And so on. The epistemological problem of characterizing the other person is symmetrically present for all parties to a situation, and any resolution requires resolution of the reflexivities that are thereby generated.

All parties to such a situation have a common interest in resolving it. All parties have an interest in an accurate interactive characterization of the situation, among many possible such characterizations. Such a problem with a common interest in its resolution is part of the general form of a coordination problem (Schelling, 1963). A coordination problem is one in which there is relative indifference among the parties about which of two or more possible solutions is arrived at — e.g., which side of the road to drive on — just so long as they all arrive at the same one. You and I may be mostly indifferent about which restaurant we meet at for lunch, just so long as we both go to the same one.

A solution to such a coordination problem constitutes a situation convention, a convention about what the situation is (Bickhard, 1980b; Lewis, 1969).⁴ Perhaps we always meet on Tuesdays at some particular restaurant for lunch, and the convention of that restaurant on Tuesdays resolves the coordination problem of how to meet for lunch. The convention of driving on the right side of the road resolves the coordination problem of what to do if cars traveling in opposite directions meet on a road.

One important property of conventions is that, although they may be created using language — we might have explicitly agreed to meet at that restaurant on Tuesdays — they

can also emerge without explicit agreement. Certainly the conventions of language could not have been created by prior agreement in discussion. An alternative form of the emergence of convention is by precedent and habituation (Berger & Luckmann, 1966; Lewis, 1969). If we happen to meet at a restaurant one Tuesday and enjoy our conversation, it might occur to us on the following Tuesday that the other person might be at that restaurant again. If we do meet again, and again have an enjoyable conversation, the likelihood of looking forward to meeting the following Tuesday is enhanced. After not very many of such precedent-forming meetings, we will habituate the practice of having lunch at that restaurant on Tuesdays with the expectation of meeting each other there — a convention between us will have emerged — and no discussion about when or where to meet need ever have occurred.

The reflexivities involved in such conventions can yield many kinds of complexity (Bickhard, 1980b; Mehan & Wood, 1975). One kind involves situations in which one party has an interest in creating and maintaining the *appearance* of a symmetry in characterizing the situation, but in reality maintaining an asymmetry. I may be trying to con you, for example, and that depends on keeping you misinformed about what is really going on in our interactions. Another form of complexity arises when one convention modifies another. I may be engaged in a marriage ceremony with someone, but, since this is occurring in a play, no state of being married to that person will follow. Such complexities can be of great importance, but they will not be the focus of this discussion.

Of greater relevance for current purposes is the distinction between situation conventions in general, and the special subclass of institutionalized conventions that hold across multiple times and people. Institutionalized conventions can hold between just two people, such as the "lunch on Tuesdays" example above, or across hundreds of millions, such as driving on the right side of the road. They can hold for indefinite periods of time, such as the driving example again, or a convention between two people as part of their relationship, or for shorter periods of time, such as rule created just for this meeting. Non-institutionalized situation conventions, on the other hand, can hold momentarily and ephemerally.

Institutionalized conventions are invoked by indications that are themselves conventionalized as indicators of some particular conventional solution to a coordination problem. These indicators will be themselves stable, such as insignia of rank or traffic signs, or highly iterable, such as recurrent Tuesday lunches or encountering oncoming traffic or invocations of ritual.

This leaves as an apparent mystery the notion of a momentary and ephemeral situation convention: how could something non-recurrent be conventionalized? Certainly conventions established through precedent and habituation must be recurrent. This impression, in fact, is so strong that the original model of convention as solution to a coordination problem limited itself to what I am calling institutionalized conventions, conventions that were manifested in regularities of recurrent behavior (Lewis, 1969).

Institutionalized and Non-institutionalized Conventions. Institutionalized conventions are invoked by stable or recurrent indicators. These indicators generally evoke some particular convention. Suppose, however, that such indicators were more context dependent in their effects. Suppose that the common understanding of the situation, the situation convention, that they produced among participants when invoked depended on the situation conventional context in which their invocation occurred. In such a case, the particular situation convention produced might never have occurred before, and might be further transformed a moment later by a next invocation of a transforming indicator: An indicator such as a stop sign always invokes the same convention regardless (relatively emergencies might be an exception) of the context in which they are encountered. A transforming indicator, on the other hand, does not evoke a particular convention per se so much as a conventional transformation of the current situation convention into another. A gesture or word that ends a class, for example, transforms the conventions of a class into those of more general social interaction, and might have no clear meaning at all in some other contexts. A deictic, such as "this", or even a proper name, such as "John", will evoke a focus on some object or person, but which object or person will depend fundamentally on the context in which such terms are used. A use of "this" may participate in a discussion of some object that has never been discussed before, and perhaps never will be again, and it may set up a short term context in which "it" alludes to the focus on that same object a short time later, perhaps in the same sentence (Bickhard & Campbell, R. L., 1992).

Such a moment in the flow of common understanding — in the flow of situation convention creation among participants — would be ephemeral. Such a phenomenon is possible because of the context *dependency* of situation convention *transformation* rather than the simpler model of context *in*dependent situation convention *invocation*.

I have argued, in fact, that a productive version of such tools for transforming situation conventions is precisely what constitutes language. Language is "a conventional system whereby conventional utterances can be generated that have conventional effects on situation conventions" (Bickhard, 1980b, pg. 83). In this view, language is an inherently

social phenomenon, not just a cognitive process of transmitting encoded mental contents as in most models of language.

The dominant view of utterances, however, is as encoded mental contents. I do not have space here to rehearse the multifarious flaws in such models, but will instead mention one line of fatal problems. Encodings are real phenomena in the world, with Morse code as an example, but they require interpreters who know or can learn the encoding rules. That is, encodings require that the representational contents involved, the specifications of what a representation is supposed to represent, be already available to the epistemic agent. An encoding can then be defined or learned as carrying that already available content, as standing-in for that already available representation: "*** stands-in for "s" in Morse code, but this works only insofar as "s" is already available.

One consequence of this is that encodings cannot be the foundational form of epistemic access. Encodings are stand-ins for the already represented, not a way in which new representational knowledge can emerge. Encodings are useful because they change the form and perhaps the medium of representation — "•••" can be sent over telegraph wires while "s" cannot — not because they are foundational representations. Encodings, therefore, cannot be the foundational form of epistemic access from the mind to the world, as in perception (Bickhard & Richie, 1983), nor from one mind to another, as in language (Bickhard, 1980b).⁵

A superficial counter to this is to posit that all primitive representations are already available innately, and that everything that can be represented at all can be represented by combinations of such innately available representational atoms (Fodor, 1981). The basic logical problem with this stance, aside from its sheer unbelievability, is that it presupposes some process by which *evolution* could create such representations. It gives no model of what that process could be, nor any reason why — given that any such process could exist — it could not be operative in individual learning and development. If it could be operative in individual learning and development, of course, the rationale for needing such an *innate* base of atomic representations evaporates (Bickhard, 1991, 1993).

If such critiques are sound (and this is just one of a great many), then language cannot be of the form standardly assumed. It cannot be the cognitive process of encoding mental contents to then be transmitted for decoding to some other mind or minds. In this standard view, language is only incidentally social — it is a fundamentally cognitive process that can be used for communication. In the alternative outlined, language is intrinsically social — interacting with situation conventions is the fundamental nature of language.

A situation convention is a common understanding of, a solution to the coordination problem of, what sorts of further interactions might be available or expectable in the situation. Language, I am proposing, is itself a productive toolkit for manipulating and influencing the flow of such situation conventions. It follows, then, that a great deal of what a situation affords will be constituted in the potentialities for further interaction of particularly linguistic sort — a great deal of what a situation affords will be constituted in the further conversation that it affords, from lecture, to debate, to argument, to discussion of such-and-such a topic, to intimate exchanges, and so on. A great deal of the ontology of situation conventions is constituted in language potentialities.

I offer situation conventions as the fundamental form of the emergence of social ontology out of individual agent level ontology. This ontology ranges from the momentary common understanding of how to resolve a pronoun in this not yet completed utterance to deeply and complexly institutionalized conventions and processes of government, law, and economics. Language itself has the ontology of being a conventional system, and of being a conventional system that operates on conventions. This recursiveness — language operating on the results of language — and reflexivity — language operating on language itself — generate enormous potential complexity and historicity in social and cultural ontologies.

One example of complexity building on such historicity is the historical emergence of richer and stronger conventional types of human relationships, which permit more complex large scale organizations among people. If typifications⁶ of human relationships are limited to kinship categories, for example, then the most complex macro-level organization is limited to some sort of *clan* structure. If there is a type of relationship that is based on personal loyalties independent of kinship, then something like *feudal* organizations become possible. If there is a typification of roles that people might occupy as distinct from their occupants, and of relationships among such roles, then institutional organizations become possible, whether in church, government, economy, or wherever which may generate typifications of types of institutions. Bethlehem Steel, for example, is an instance of the type of institution of *corporation*, and such an organizational instance is possible only because of the more general typification of the general type. A particular marriage, for a different level of example, will be an instance of whatever institutional characterizations are available in that society and culture for marriage, and, again, that instance is possible only because of the more general typification available. Similarly, for an example with a different temporal scale, the interactions between customer and checkout clerk play out an institutionalized role relationship thousands of times a day.

In each case, the institutional resources available in the society and culture permit us to characterize both ourselves (e.g., customer) and the other (e.g., check-out clerk), both in immediate interaction and in longer term conditionalized interactive characterizations. Many characteristics of a corporate CEO, for example, may be strongly institutionalized, perhaps even legally so, even though rarely manifest or expected to be manifest — they may be conditional on rare events or circumstances. The responsibilities when declaring corporate bankruptcy, for one example, are conditional and relatively rare.

I have argued that social reality emerges in situation conventions, and that the complexity of human social reality is enormously expanded by the recursiveness and reflexivities of the special meta-convention of language — a conventional system for operating on conventions. The social world is constituted as organizations of institutional forms and their instances, the interactions — largely though not exclusively linguistic — within and among those instances, and as enabled by the conceptual conventions that frame them. These social realities constitute much of the world of the individual, at least as important as the rocks and trees, houses and automobiles, and other physical furniture of the world. I will argue that they constitute much of the normative world of the person as well, and, ultimately, participate in the very ontology of the person.

Normativity and Values

Situation conventions, thus social realities, involve normative aspects, sometimes powerful normative aspects. They prescribe what one ought to do and feel, what is worthwhile doing and feeling. Such normativities, in turn, are emergent from, ontologically involved in, and function as constraints — and enabling constraints — upon individual level values and actions. In this section, I address these points concerning social normativity, individual normativity, and some of the interrelationships between them.

Social Normativity. One sense in which situation conventions are normative is they involve mutual expectations. After many months of meeting for lunch on Tuesdays, we will have mutual expectations of doing so, and will correspondingly expect there to be some reason for missing a Tuesday lunch, if it is missed, and some reasonable effort to let the other know if a Tuesday is going to be missed. These expectations can be sufficiently strong and taken for granted that we may (tentatively) conclude that some sort of emergency has come up if the other simply fails to show.

If an oncoming car attempts to pass by us on the wrong side of the road, our expectations will be deeply and dangerously violated. The cost of failing to solve this

coordination problem can be the loss of one's life, and the strength of the normative force of the convention is correspondingly high.

In general, this form of social normativity arises from the costs and benefits of the convention. Failure of the convention risks the costs of failure of the coordination problem, and whatever else may depend on it.

Another form of social normativity arises when the institutional forms and typifications are *about* normative issues. It may be part of the typification of corporate CEO, for example, not only that there are various multiple responsibilities involved, but also that it is a meaningful and worthwhile aspect of someone's life to aspire to and to undertake such a role. In a different culture, it might be understood that a meaningful and worthwhile form of life to aspire to and undertake is that of a mendicant Buddhist monk. There is a common interest in at least partially characterizing such life choices, or possible such life choices, even for those that I do not — and perhaps would not or could not — choose myself. This is a life-choice level version of the point that I may characterize someone as playing out the role of check-out clerk while I am in the role of customer.

There will be ideologies, of varying degrees of explicitness and elaboration, associated with such normative life possibilities that explain and defend their meaningfulness (Berger & Luckmann, 1966). Such ideologies are involved at this level because issues of ultimate meaningfulness and normativity are at stake, whereas issues in the check-out clerk and customer relationship will generally be more instrumental for all parties involved. Life choice potentialities address problems of making sense of life, with its vicissitudes and triumphs and ultimate death. There is a common interest involved here in that all parties must characterize each other, at least in general terms, concerning what is taken to be important and what not, and also in that all parties must resolve these issues for themselves in some way or another, and these cultural forms constitute a major resource for attempting to do so.

That is, similar to the case in which the check-out clerk and customer relationship is a typification available to everyone in a relevant culture, and serves as a resource for various ends for all involved, a cultural norm of a form of meaningful life is a typification available to everyone in a relevant culture and serves as a resource for individuals in their own struggles with meaningfulness, self-respect, and other fundamental life issues. There are these parallels in the two forms, but there are also deep dissimilarities. In these two examples, the clerk-customer interaction is momentary, recurrent, and instrumental; the mendicant monk is lifelong, not inherently recurrent, and not instrumental. That the clerk and customer typification is intrinsically a relational interaction is not necessarily a

fundamental distinction: being a mendicant monk also requires the participation of others, and is a viable option only in a culture in which the society at large will provide support for such individuals.

The deeper differences are between instrumental and non-instrumental norms. Non-instrumental norms may also involve momentary and recurrent situations: I cannot instrumentally satisfy a norm of feeling kindly toward others, nor can I instrumentally decide to be at peace with the world today. Such norms involve the whole person — they are *about* the whole person — and therefore it is not possible to create the separation that is involved in adopting an instrumental norm for the sake of some other value outside of the norm or goal or value being adopted (Campbell & Bickhard, 1986). If adopted instrumentally, they create versions of the self-contradiction of commanding oneself to be spontaneous: e.g., be spontaneously kind or at peace.

It is reasonably clear how a person makes use of an instrumental possibility offered by his or her culture, such as a purchase at a store, but how is it even conceptually possible to "make use of" a cultural resource for *non*-instrumental issues? Doesn't this inherently encounter the self-contradiction just mentioned? Resolving this issue requires a closer look at the individual level ontology of norms and values.

Individual values. Values are complex phenomena, involving multiple psychological processes: representation, motivation, learning, emotions, language, and levels of knowing. This is not the opportunity to elaborate all of these; I need just enough to be able to make some crucial points about the development of values (Campbell, Christopher, & Bickhard, in press; Campbell & Bickhard, 1986). To do this, I need to draw out some consequences of the underlying interactive model for processes of learning and development.

The arguments against encodings as foundational hold just as strongly against other forms of epistemic relationships as they do against language being an encoding phenomenon. In particular, perception cannot be a matter of encoding the environment (Bickhard & Richie, 1983), cognition cannot be a matter of manipulating encoding symbols (Bickhard, 1993, 1998, 1999, 2000, in press; Bickhard & Terveen, 1995), and, most important for current purposes, learning cannot be a matter of "internalizing" external facts, structures, patterns, skills, or anything else. If our knowledge of the world were in any sense an internalization, a copy, of the world, then we would have to already know the world in order to construct our internal copy of it (Piaget, 1970; a correct insight, in spite of Piaget's own unhelpful use of the notion of internalization).

In general, so long as we think of learning as some version of the signet ring impressing itself into the waxed slate (Plato, 1892; Aristotle, 1908) — in contemporary terminology, *transduction* if at one single time and *induction* if the scratches into the wax are made over time — then we are tempted to think of learning as such a process of the world impressing itself into a passive mind. If representation is emergent in systems of action and interaction, however, as Piaget argued, and as I hold, then there is no temptation to think that the world can impress itself into a mind and create a competent interactive system (Bickhard & Campbell, 1989; Piaget, 1954, 1971, 1977). Encoding and internalization models presume structural homomorphisms between mind and environment; interactive systems have no such homomorphism with the environments that they are competent to interact with. But, if structural homomorphism is not the essence of knowledge and representation, then impression into a passive mind cannot be the process of learning (Bickhard, 1980b).

Instead, mind must be active and constructive, and, barring omniscience, not all of those constructions can be the right ones. Some will fail and must be modified further or discarded and a new try attempted. That is, an action and interaction based model of representation forces a constructivism, and a variation and selection constructivism — an evolutionary epistemology (Bickhard, 1992b, in press; Bickhard & D. T. Campbell, in press; D. T. Campbell, 1974; Popper, 1965).

Goals Can be simply set points for internal conditions, such as blood sugar level, or they can be complex representations themselves. Goals often involve strong motivation and can also involve emotional stakes and expectations (Bickhard, 2000b), such as the hopes and fears involved in close relationships and careers. At a first level, the satisfiers of goals will be either internal conditions satisfying a set point or external conditions meeting representational criteria. Goals can be instrumental toward other goals, a part of the process of attempting to satisfy some other goal, or they can be more primary and permanent or recurrent, such as a taste for a particular food or music.

Knowing Levels. Human beings, however, are capable of more than one level of knowing (Bickhard, 1978; Campbell & Bickhard, 1986; Piaget, 2001). A first level interactive system may well have properties that it would be useful for the overall system to be able to represent. For example, there may be one or more particularized instances of a heuristic strategy of doing something three times before giving up and trying another approach to the goal. To be able to represent the commonality among such heuristics — try three times — could help generalize the strategy to new circumstances. Or, for another

example, it could be useful to note that various kinds of manipulations of units, such as marbles or pebbles or coins, always permits a reverse manipulation back to the original configuration — unless a unit is added or subtracted. Representing such invariance of number under various manipulations, in fact, has many uses.

Similarly, a second level system will have properties that might be useful to be able to represent from a third level. An example might be to be able to represent a space of possibilities of configuration in an experiment so as to make sure that all such possibilities are accounted for (Bickhard, 1978; Campbell & Bickhard, 1986).

For current purposes, however, the important kind of phenomenon is that of higher level goals. Goals at higher knowing levels will be about the organization and process at lower levels, or they can be about the entire system. Insofar as such goals are not just momentarily instrumental toward others, insofar as they are primary (at the highest, non-instrumental, level), they will constitute values about the organization and process that constitutes the person. Again, as at lower levels, they can involve potentially strong motivational and emotional aspects and expectations.

Such values may be explicit and articulable, or they may be implicit in various kinds of phenomena and circumstances that make us uneasy or for which we are vigilant. There can also be complex interactions. For one example, suppose I have an articulable value of being safe, but that certain social situations do not feel safe to me because they threaten to expose some feared weakness or inadequacy. That fear itself may be implicit, presupposed, in many other stances toward life and ways of being that I have grown up with. And it may be of extreme difficulty for me to try to examine all of this because examining it is already acknowledging the weakness and inadequacy that I fear. That way lies psychopathology (Bickhard, 1989; Bickhard & Christopher, 1994; Christopher & Bickhard, 1994).

My current focus, however, is how values develop, and, ultimately, how that development can make use of socially and culturally available resources. Values must be constructed in some sort of evolutionary epistemological process, similarly to everything else in the interactive system. Internally, values will be constructed with respect to organizations and processes at a lower level. Those lower level phenomena will be what the higher level value representation is constructed to represent. Those lower level phenomena, then, will tend to constitute satisfiers of the newly constructed value. The lower level phenomena, however, do not fully determine the higher level value — there may be many kinds of values that a particular way of being could be a satisfier of, and any single value constructed on the basis of that lower level way of being in effect "unfolds"

one of those values that previously had been implicit in the lower way of being. Such unfolding, however, makes that formerly implicit value now explicit, and it may be found to be in conflict with other values or with other ways of being at the lower levels. This kind of value conflict, and processes and attempts to remove it, can generate its own important tendencies and motivations toward further development.

The selection pressures involved in the construction of a new value are not limited to the internal milieu being unfolded. They will include external criteria. It is not possible to construct the value of being the toughest kid on the playground if there are no playgrounds and the concept is simply not available in your culture. On the other hand, in attempting the construction of a value unfolding some sense of wanting respect, if playgrounds are a part of your world and being tough seems recommended as a way of being respected, then such a construction becomes quite feasible.

Here we find the general answer to the question of how cultural resources can play a fundamental role in the development of even non-instrumental values in the individual. Development is a quasi-evolutionary process. It makes use of what is available, and cultural resources constitute a crucially important part of what is available. A quasi-evolutionary process will tend to explore possibilities that are available to it, including possibilities in the external social and cultural world. Even insofar as the search for values, or the reflective analysis and potential modification of values, is deliberate and itself conscious, social possibilities that do not exist cannot be explored, and conceptual possibilities that are not culturally made available are unlikely to be created.

Cultural resources, then, even those constituting underlying fundamentally valued ways of life, frame the possibilities that the individual can explore in their own development and in their search for an acceptable way of being. Society frames the possibilities for the core of personal identity.

Relationships. Another important aspect of sociality is to be found in longer term institutionalized relationships among two or a few people — friendships, social groups, intimate relationships, marriage. The primary significance of such relationships that I wish to focus on here is that, while some deep values can be lived in relationship to society at large — perhaps the monk and the professional would be two kinds of examples — other values have to do with more individuated forms of relating. I can be kind to (or more powerful than) a stranger in a moment of interaction, but I can be a worthwhile spouse or a successful parent (or an ultimately triumphant tyrant) only over much longer times. More simply, some values are about what we do, while others have to do with who we are and

with our biographies as we attempt to live and make sense of them. Some of the deepest of such biographical values have their realm of development in such long term relationships.

Yet even here we find the fundamental role of society and culture. What counts as a successful friendship or marriage, and what kinds of friendship or marriage I might be able to find a partner for, are strongly constrained by the society and its resources that I live in. It is difficult today for a man to be a successful lord, benefactor, and protector of the household in the sense in which it might have been in the nineteenth century. It is difficult to even want to do so — the cultural and conceptual resources have changed (though clearly various vestigial remnants are to be found).

Ontologically Social Persons

An infant is a socially tuned biological creature with marvelous capacity for development into a participant in, and co-creator of, social realities. As the infant develops, the ability to interact with the physical world and the world of abstractions, such as numbers, increases enormously, but the social aspect of interaction occupies an ever greater portion of overall interactive capabilities. The individual becomes a language user, and becomes a generating member of conversations, social hierarchies, role relationships, institutionalized relationships, friendships, intimate partnerships, collegial relationships and those of superiors and subordinates, and so on. The infant becomes a social being; a social and cultural being, a person, emerges in the development of the infant.

The notion of emergence is appropriate here (Bickhard, 2000c; R. J. Campbell & Bickhard, in preparation). In infancy we begin as primarily biological creatures with a superlative openness to social development. In adulthood, the biology is different, but not massively so. Instead what has most changed between infancy and adulthood is the emergence of an entirely new kind of being, one who participates in society and culture and history. And the person, in so participating, participates in the emergent creation of society in turn. Non-aggregative novel properties, myriads of them, appear in the emergence of the social person, and, further, we find major and widespread examples of downward causation (D. T. Campbell, 1974b, 1990) such as building houses and highways and high-speed internet systems.⁸

The person, then, as distinct from the biological body, is strongly social in his or her ontology. The person is constituted in the multiple ways of being social that that individual has developed in that society and culture and historical time. And, to re-iterate, this is largely an ontology of language processes: of discussions, lectures, arguments, commands, sympathies, jokes, rituals, and so on and on. The ontology of the person is massively social, which, in turn, is massively an ontology of language.

Ontological Hermeneutics. This social ontology of persons is convergent with the notions of ontological hermeneutics (Bickhard, 1992c; Campbell & Bickhard, 1986; Gadamer, 1975, 1976). It differs, however, in that the interactive social ontology of persons is an emergent ontology, not an ontology that purports to capture the totality of human ontology. It is emergent in the biological and psychological development of an individual who, however massively social, is not entirely social in his or her being.

This point is important not only as a comparison of theories, but also for its potential implications regarding, for example, human ethics. If human ontology is entirely social, if language constitutes the boundaries of my world, then it may be that to violate the ethics embedded in my culture is to in some sense violate my own being. This frames a powerful model of ethics that is open to the ontological hermeneuticist who finds human ontology to be entirely social, but it also forces the conclusion that no principles of ethics have valid application beyond the boundaries of the cultural tradition in which they were formed. There is no valid ethical reasoning to be done by someone in the West European tradition about Aztec human sacrifice or tribal female "circumcision".

In contrast, the interactive model accounts for the massive social ontology of persons, but embeds that in a universal ontology of biological beings open to and with inherent interests in sociality, and with particular biological and psychology capacities, such as the knowing levels, that participate and make possible that emergence of the ontologically social person. In such a view, language does not define the horizons of life. It is at least possible that there are universals of intrinsic social and individual interest in the nature of all persons, regardless of culture. If so, violations of such interests would constitute violations of the intrinsic nature of being for anyone — they would be candidates for trans-cultural kinds of ethical failures. Making a case for particular such universals would require extensive discussion beyond what I provide here, but one general theme of such a discussion (though not the only one) would be that the inherent social openness of human beings involves an inherent interest in individual flourishing with respect to that sociality, and ways of being that violate that interest thereby violate an inherent aspect of one's being. It seems plausible, for example, that developing into the kind of person who enjoys torturing others inherently constitutes a failure to be a full human person, no matter what the culture may contain. This model does not give any kind of perspective of objective certainty. Instead, it provides an ontological framework that permits defeasible explorations of trans-cultural ethical issues and reflections.⁹

A Meta-theoretical Point

The model outlined of the social ontology of the person is conceptually dependent on the underlying model of persons as interactive systems. It is the openness of the infant to the development of special kinds of social interactions that permits the emergence of a co-creating participant in such social realities. Similarly, it is the underlying interactive ontology that makes sense of there being a genuine emergence involved in this development: an emergence of a novel, massively downward causing, new level of interaction.

This is in contrast to the theoretical resources available in other frameworks. Attachment theory, for example, addresses human social development with some powerful research programs (Bowlby, 1969; Sroufe, 1984, 1995). Attachment theory, however, has largely grown out of an underlying object relations theory. But the sociality of people in object relations theory is a matter of the existence of innate energies or affects that are devoted to motivating, to pushing, interactions with others (Bickhard, 1992). This is a functional sociality, but it is not an ontological sociality of the person. It is a sociality of actions only, genetically induced, much like the sociality of social insects, but with more scope for learning involved. The sociality of insects is inherent in the genome, not in the ontology of the individual insect. Human beings are socially open as infants, but their sociality is not genetically fixed (Berger & Luckmann, 1966). It develops as a culture sensitive ontological emergent over many years.

Similarly, information processing models, which dominate contemporary models of cognition, provide no resources for understanding human ontology as being intrinsically and emergently social. The data banks of an information processing system may or may not contain a great deal of information about interacting with other people. In either case, however, nothing about the information processing system itself is changed. Human beings as information processors can process social information along side of non-social information, but there is nothing special about that information qua information, and certainly no ontological emergence in consequence of storing it in the data (Bickhard, 1995).¹⁰

The presuppositions of major theoretical orientations today make understanding human social ontology impossible. Modeling human social ontology, then, is not independent of framework or grounding theories. It requires an action or interaction based model — one in the general pragmatic tradition of Peirce and Piaget. Conversely, it seems

abundantly clear that human beings *are* largely social in their basic being, so any framework that precludes accounting for that ontological sociality is thereby undermined.

Conclusions

Humans are ontologically social. They are constituted in important respects out of the resources available in their cultures and social environments. This social ontology is emergent in the development in the individual of the ability to co-constitutively participate in social realities, in situation and institutionalized conventions. These influences are deepest in their framing of the issues and possibilities of what constitutes meaningful and successful ways of being in one's life and one's relationships.

Accounting for such phenomena requires being able to account for the emergence of such a social ontology in individual social development. Neither the sociality of innate energies or affects in object relations theory, nor the sociality of massive social data in an information processor's data banks can account for such emergence. It requires a pragmatic account, in which the person *is* his or her way of interacting in the world. Given such an integration of person and action, as there emerge special social realities to interact with and as the individual becomes someone who can participate in such interactions, a further emergence occurs: the individual ontologically becomes a social, cultural, person. Only a Piagetian-style, action-based, pragmatist model can begin to account for the full complexities involved.

References

- Aristotle (1908). De Anima. (On the soul) In *The Works of Aristotle*, ed. W. D. Ross (424a 17-22). Oxford, England: Clarendon Press.
- Berger, P. L., Luckmann, T. (1966). *The Social Construction of Reality*. New York: Doubleday.
- Bickhard, M. H. (1978). The Nature of Developmental Stages. *Human Development*, 21, 217-233.
- Bickhard, M. H. (1980). A Model of Developmental and Psychological Processes. *Genetic Psychology Monographs*, 102, 61-116. Taken from: Bickhard, M. H. (1973). A Model of Developmental and Psychological Processes. Ph. D. Dissertation, University of Chicago.
- Bickhard, M. H. (1980b). *Cognition, Convention, and Communication*. New York: Praeger Publishers.
- Bickhard, M. H. (1989). The Nature of Psychopathology. In Lynn Simek-Downing (Ed.) *International Psychotherapy: Theories, Research, and Cross-Cultural Implications*. Westport, CT: Praeger Press.
- Bickhard, M. H. (1991). The Import of Fodor's Anti-Constructivist Argument. In Les Steffe (Ed.) *Epistemological Foundations of Mathematical Experience*. (14-25). New York: Springer-Verlag.
- Bickhard, M. H. (1992). Scaffolding and Self Scaffolding: Central Aspects of Development. In L. T. Winegar, J. Valsiner (Eds.) *Children's Development within Social Contexts: Research and Methodology*. Erlbaum, 33-52.
- Bickhard, M. H. (1992b). Piaget on Variation and Selection Models: Structuralism, logical necessity, and interactivism. In L. Smith (Ed.) *Jean Piaget: Critical Assessments*. Routledge, chapter 83, 388-434.
- Bickhard, M. H. (1992c). How Does the Environment Affect the Person? In L. T. Winegar, J. Valsiner (Eds.) *Children's Development within Social Contexts: Metatheory and Theory.* (63-92). Erlbaum.
- Bickhard, M. H. (1993). Representational Content in Humans and Machines. *Journal of Experimental and Theoretical Artificial Intelligence*, *5*, 285-333.
- Bickhard, M. H. (1995). World Mirroring versus World Making: There's Gotta be a Better Way. In L. Steffe, J. Gale (Eds.) *Constructivism in Education*. (229-267). Erlbaum.

- Bickhard, M. H. (1998). Levels of Representationality. *Journal of Experimental and Theoretical Artificial Intelligence*, 10(2), 179-215.
- Bickhard, M. H. (1999). Interaction and Representation. *Theory & Psychology*, 9(4), 435-458.
- Bickhard, M. H. (2000). Information and Representation in Autonomous Agents. *Journal of Cognitive Systems Research*, 1, 65-75. http://www.elsevier.nl.
- Bickhard, M. H. (2000b). Motivation and Emotion: An Interactive Process Model. In R. D. Ellis, N. Newton (Eds.) *The Caldron of Consciousness*. (161-178). J. Benjamins.
- Bickhard, M. H. (2000c). Emergence. In P. B. Andersen, C. Emmeche, N. O. Finnemann, P. V. Christiansen (Eds.) *Downward Causation*. (322-348). Aarhus, Denmark: University of Aarhus Press.
- Bickhard, M. H. (in press). Critical Principles: On the Negative Side of Rationality. *New Ideas in Psychology*.
- Bickhard, M. H. (in press-b). The Dynamic Emergence of Representation. In H. Clapin, P. Staines, P. Slezak (Eds.) *Representation in Mind: New Approaches to Mental Representation*. Praeger.
- Bickhard, M. H., Campbell, Donald T. (in press). Variations in Variation and Selection:
 The Ubiquity of the Variation-and-Selective-Retention Ratchet in Emergent
 Organizational Complexity. *Foundations of Science*.
- Bickhard, M. H., Campbell, R. L. (1989). Interactivism and Genetic Epistemology. *Archives de Psychologie*, *57*(221), 99-121.
- Bickhard, M. H., Campbell, R. L. (1992). Some Foundational Questions Concerning Language Studies: With a Focus on Categorial Grammars and Model Theoretic Possible Worlds Semantics. *Journal of Pragmatics*, *17*(5/6), 401-433.
- Bickhard, M. H., Christopher, J. C. (1994). The Influence of Early Experience on Personality Development. *New Ideas in Psychology*, *12*(3), 229-252.
- Bickhard, M. H., Richie, D. M. (1983). On the Nature of Representation: A Case Study of James Gibson's Theory of Perception. New York: Praeger Publishers.
- Bickhard, M. H., Terveen, L. (1995). Foundational Issues in Artificial Intelligence and Cognitive Science: Impasse and Solution. Elsevier Scientific.
- Bowlby, J. (1969). Attachment. New York: Basic.
- Campbell, D. T. (1974). Evolutionary Epistemology. In P. A. Schilpp (Ed.) *The Philosophy of Karl Popper*. (413-463). LaSalle, IL: Open Court.

- Campbell, D. T. (1974b). 'Downward Causation' in Hierarchically Organized Biological Systems. In F. J. Ayala, T. Dobzhansky (Eds.) *Studies in the Philosophy of Biology*. (179-186). Berkeley, CA: University of California Press.
- Campbell, D. T. (1990). Levels of Organization, Downward Causation, and the Selection-Theory Approach to Evolutionary Epistemology. In Greenberg, G., & Tobach, E. (Eds.) *Theories of the Evolution of Knowing*. (1-17). Hillsdale, NJ: Erlbaum.
- Campbell, R. J., Bickhard, M. H. (in preparation). Physicalism, Emergence, and Downward Causation.
- Campbell, R. L., Bickhard, M. H. (1986). *Knowing Levels and Developmental Stages*. Contributions to Human Development. Basel, Switzerland: Karger.
- Campbell, R. L., Christopher, J. C., Bickhard, M. H. (in press). Self and Values: An Interactivist Foundation for Moral Development. *Theory and Psychology*.
- Christopher, J. C., Bickhard, M. H. (1994). The persistence of basic mistakes: Reexploring psychopathology in Individual Psychology. *Journal of Individual Psychology*, *50*, 223-231.
- Clark, A. (1993). Associative Engines. Cambridge, MA: MIT Press.
- Cummins, R. (1991). Meaning and Mental Representation. MIT.
- Cummins, R. (1996). Representations, Targets, and Attitudes. MIT.
- Dretske, F. I. (1981). *Knowledge and the Flow of Information*. Cambridge, MA: MIT Press.
- Dretske, F. I. (1988). Explaining Behavior. Cambridge, MA: MIT Press.
- Dunbar, R. I. M. (1992). Neocortex size as a constraint on group size in primates. *Journal of Human Evolution*, 20, 469-493.
- Dunbar, R. I. M. (1993). Coevolution of neocortical size, group size and language in humans. *Behavioral and Brain Sciences*, *16*, 681-735.
- Fodor, J. A. (1975). The Language of Thought. New York: Crowell.
- Fodor, J. A. (1981). The present status of the innateness controversy. In J. Fodor *RePresentations* (257-316). Cambridge: MIT Press.
- Fodor, J. A. (1986). Why Paramecia don't have Mental Representations. In P. A. French, T. E. Uehling, H. K. Wettstein (Eds.) *Midwest Studies in Philosophy X: Studies in the Philosophy of Mind.* (3-23). Minneapolis, MN: University of Minnesota Press.

- Fodor, J. A. (1987). Psychosemantics. Cambridge, MA: MIT Press.
- Fodor, J. A. (1990). A Theory of Content. Cambridge, MA: MIT Press.
- Fodor, J. A. (1990b). Information and Representation. In P. P. Hanson (Ed.) *Information, Language, and Cognition*. (175-190). Vancouver: University of British Columbia Press.
- Fodor, J. A. (1991). Replies. In B. Loewer, G. Rey (Eds.) *Meaning in Mind: Fodor and his critics*. (255-319). Oxford: Blackwell.
- Fodor, J. A. (1998). Concepts: Where Cognitive Science went wrong. Oxford.
- Gadamer, Hans-Georg (1975). Truth and Method. New York: Continuum.
- Gadamer, Hans-Georg (1976). *Philosophical Hermeneutics*. Berkeley: University of California Press.
- Gilbert, M. (1989). On Social Facts. Princeton.
- Goody, E. N. (1995). Social Intelligence and Interaction. Cambridge.
- Haugeland, J. (1991). Representational Genera. In W. Ramsey, S. P. Stich, D. E.Rumelhart (Eds.) *Philosophy and Connectionist Theory*. (61-89). Hillsdale, NJ: Erlbaum.
- Humphrey, N. K. (1976). The Social Function of Intellect. In P. P. G. Bateson, R. A. Hinde (Eds.) *Growing Points in Ethology*. (303-317). London: Cambridge University Press.
- Levine, A., Bickhard, M. H. (1999). Concepts: Where Fodor Went Wrong. *Philosophical Psychology*, *12*(1), 5-23.
- Lewis, D. K. (1969). Convention. Cambridge, Mass.: Harvard.
- Mehan, H., Wood, H. (1975). The Reality of Ethnomethodology. New York: Wiley.
- Millikan, R. G. (1984). *Language, Thought, and Other Biological Categories*. Cambridge, MA: MIT Press.
- Millikan, R. G. (1993). White Queen Psychology and Other Essays for Alice. Cambridge, MA: MIT Press.
- Newell, A. (1980). Physical Symbol Systems. Cognitive Science, 4, 135-183.
- Newell, A., Simon, H. A. (1975). Computer Science as Empirical Inquiry: Symbols and Search. In (1987). *ACM Turing Award Lectures: The First Twenty Years, 1966-1985.* (287-313). New York: ACM Press; Reading, Mass.: Addison-Wesley Pub. Co.

- Newell, A., Simon, H. A. (1987). Postscript: Reflections on the Tenth Turing Award Lecture: Computer Science as Empirical Inquiry Symbols and Search. In *ACM Turing Award Lectures: The First Twenty Years*, 1966-1985. (314-317). New York: ACM Press; Reading, Mass.: Addison-Wesley Pub. Co.
- Piaget, J. (1954). The Construction of Reality in the Child. New York: Basic.
- Piaget, J. (1970). Genetic epistemology. New York: Columbia.
- Piaget, J. (1971). Biology and Knowledge. Chicago: University of Chicago Press.
- Piaget, J. (1977). The Role of Action in the Development of Thinking. In W. F. Overton, J. M. Gallagher (Eds.) *Knowledge and Development: Vol. 1.* (17-42). New York: Plenum.
- Piaget, J. (1995). Sociological Studies. Routledge.
- Piaget, J. (2001). *Studies in Reflecting Abstraction*. Edited and translated by Robert L. Campbell. Psychology Press.
- Plato (1892). Theaetetus. In *The Dialogues of Plato, Vol. IV*, ed. and trans. B. Jowett (pg. 191). Oxford, England: Clarendon Press.
- Popper, K. (1965). Conjectures and Refutations. New York: Harper & Row.
- Rumelhart, D. E. (1989). The Architecture of Mind: A Connectionist Approach. In M. I. Posner (Ed.) *Foundations of Cognitive Science*. (133-160). Cambridge, MA: MIT Press.
- Schelling, T. C. (1963). *The strategy of conflict*. New York: Oxford University Press.
- Smolensky, P. (1988). On the Proper Treatment of Connectionism. *Behavioral and Brain Sciences*, 11, 1-74.
- Sroufe, L. A. (1984). The Organization of Emotional Development. In K. R. Scherer, P. Ekman (Eds.) *Approaches to Emotion*. (pp. 109-128). Hillsdale, NJ: Erlbaum.
- Sroufe, L. A. (1995). Emotional Development. Cambridge.
- Vera, A. H., Simon, H. A. (1993). Situated action: A symbolic interpretation. *Cognitive Science*, 17(1), 7-48.

Endnotes

- ² Piaget argues that "there are neither individuals as such nor society as such. There are just interindividual relations." (Piaget, 1977/1995, p. 210) The contrast between "individuals as such" and "society as such" is a false opposition, however, and, therefore, the presumed third option "There are just interindividual relations" is incomplete and misleading. The relationships between individuals and social reality are much more complex and metaphysically deeper than these options suggest, and the task undertaken in this chapter is to outline a model of some of those relationships. In particular, the ontology of persons is itself mostly, though not exclusively, social. Nevertheless, although Piaget was too simplistic in his characterization of the relation between the individual and society, this human social ontology can be modeled only with the general kind of action framework espoused and developed by Piaget.
- ³ Such a model, of course, raises the interesting question of why our ancestors took off on this positive feedback trajectory, and not some other species. Certainly various enabling conditions were required, such as second level knowing, both for social complexity in general and language in particular (Campbell & Bickhard, 1986), but other primates share at least rudimentary versions of this. Dunbar (1992, 1993), for example, argues that increased social group size put pressure on means of maintaining social relationships grooming, for example, is too time and labor intensive for large groups and early language may have developed to serve this function, thus initiating the complexity feedback. Even if so, this focuses the question on why group size was increasing. It seems plausible that this sociality-intelligence feedback was an evolutionary potentiality waiting to happen, and it was a relatively arbitrary contingency that ancestral *homo sapiens* hit some threshold for it rather than some other species.
- ⁴ Lewis' model has been strongly criticized, e.g., in Gilbert (1989). I will not address these criticisms here, except to say that they focus on aspects of Lewis' model that are not carried over into my own in Bickhard (1980), and the alternative offered seems too narrow. This is a topic that deserves more careful consideration elsewhere.
- ⁵ Contrary to most contemporary models of representation: Cummins (1991, 1996), Dretske (1981, 1988), Fodor (1975, 1981, 1986, 1987, 1990, 1990b, 1991, 1998), Millikan (1984, 1993), Newell (1980), Newell & Simon (1975, 1987), Vera & Simon (1993), Clark (1993), Haugeland (1991), Rumelhart (1989), Smolensky (1988). See Bickhard (in press-b), Bickhard & Terveen (1995), and Levine & Bickhard (1999).
- ⁶ Note that a typification is itself a solution to a coordination problem the problem of how to socially characterize or categorize the relevant phenomena or conditions. These are of particular importance when the institutionalized characterizations are part of the ontology of what is being characterized (Berger & Luckmann, 1966).
- ⁷ Something akin to the unfolding process occurs in social and cultural evolution as well as in individual development. For example, the evolution of what counts as a successful professional, a successful spouse, and a successful parent, have no grand designer ensuring that they remain in some kind of integrated coherence. They will unfold over time in ways that can be divergent and can create on a social level conflicts that are akin to those found in the unfolding of values in the individual. Clearly, however, neither the quasi-evolutionary process of social development per se nor the social processes that react to the conflicts of such divergence, will be the same as in the individual.
- ⁸ Downward causation is the causal influence of higher levels of organization on the dynamics of lower levels. It is often taken as the benchmark of genuine emergence (Bickhard, 2000c; Campbell, R. J., & Bickhard, in preparation).

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- ⁹ This framework makes much more sense when examined from a character or virtue ethical perspective than from any kind of individual action or duty perspective. If the most basic failures are failures of being a person, of character, then a virtue ethics is almost forced. Note that such failures are with respect to an inherent ontology of persons, not failures to meet some contingent innate criteria. That is, such moral constraints could not be fundamentally different without human beings being ontologically no longer human. Gene based "morality", in contrast, is contingent on evolutionary history, and could be quite different if selection pressures had been different or if the actual selection pressures had produced a different evolutionary response. Gene based "morality" may not be arbitrary in the sense that evolutionary reasons might be found to explain it, but it is arbitrary relative to human ontology.
- ¹⁰ Furthermore, the motivation for interacting socially is utterly opaque from such a perspective. There should be no more reason to interact social than non-socially from the perspective of such a model, except perhaps insofar as basic biological rewards are found or needs met. Such a conception of relating as being driven solely by food and sex was characteristic of early psychoanalytic theorizing, and was one of the sources of the multiple ad-hoc additions to psychoanalytic theory, including object relations theory, made over the ensuing decades such a model was simply too divergent from reality for even analysts to overlook (Bickhard, 1992).