

The Emergent Ontology of Persons Mark H. Bickhard

Persons are developmental social emergents. In this chapter, I will present a model of that emergent ontology. The model requires that ontological emergence in general is possible, and that normative emergence in particular is a metaphysical reality. That is, persons are part of the natural world, but this cannot be accounted for within a “naturalism” that excludes emergence and normative emergence.

I argue elsewhere that normativity can be integrated within the world as a natural realm of emergence if we adopt a process metaphysical framework, and, furthermore, that there are deep reasons, independent reasons, for shifting from the substance and entity metaphysics that has dominated Western thought for millennia to a process metaphysics. A shift to a process metaphysics is forced by both conceptual and scientific reasons, and a process metaphysics makes possible a natural, non-eliminative, metaphysical emergence, including that of normative emergence. These arguments have been developed elsewhere (e.g., Bickhard, 2000, 2009a), and the resulting framework will be assumed here.

Central to this discussion is the normative emergence of agency. Biological creatures are agents, and this is so in the full normative sense in which agentive interactions with an environment can be successful or unsuccessful, relative to the agentive organism itself (Bickhard, 2009a, 2009b; Campbell, 2009; Hooker, 2009). A model of agency as a special form of open system interaction provides a full biological ground for agency, and transcends some of the deep problems involved in attempting to model agency in terms of, for example, reasoned computations on symbolic representations, eventuating in some special event that initiates a causal chain extending into the environment. Every single aspect of this standard framework is false and untenable (Bickhard, 2009a, 2009b, 2011). Interactive agency will, in this discussion, be the framework within which representation, language, social ontology, and, especially, persons as special kinds of emergent social agents, will be developed. It is the framework within which persons are understood as full normative ontologies within the natural world.

Agency and Social Ontology

Persons are agents, special socially adapted and socially co-constitutive agents. The developmental emergence of such person-agents occurs in each individual. This is unlike, for example, social insects in which there is arguably a social ontological emergence at the level of the nest or hive, but there is no emergence at the level of the individual insect. The emergence of persons, then, occurs as individuals develop the agencies required in order to participate in, and thereby help constitute, the cultural and social realities within which that development occurs. A first step toward accounting for this is to model complex agency; a second is to model the emergence of social ontologies; and a third is to model the dynamics of developmental processes that create such emergent persons.

Toward Complex Agency

The selections of which interactions to engage in by simple biological agents, such as a bacterium, are themselves relatively simple. The bacterium that will swim so long as it is headed up a sugar gradient, but tumble if it finds itself headed down a sugar gradient, selects between swimming and tumbling, but the “selection” is primarily a triggering function.

A more complex agent, such as, perhaps, a frog, faces multiple possible interactions at given moments, and must select among those multiple possibilities. It could, for example, flick its tongue to the right in order to eat a fly, or to the left to eat a different fly, or down for a worm. Such selection requires a functional indication of what interactions are currently possible among which the selection(s) can take place, and some sort of sensitivity to the environment in order to set up those functional indications of possibilities.

Such branching interaction potentialities are also conditional: setting up an indication of an interaction possibility requires that some appropriate condition has been detected, or differentiated, in the environment. Some differentiation that, at least much of the time, happens to differentiate a fly should have occurred prior to setting up the tongue flicking and eating indication. Such conditional readinesses to set up indications may or may not be engaged: there may or may not be a fly at some given location.

But the combination of the possibilities of *branching* indications of interaction possibility and *conditionalized* indications of interaction possibility generate the potential for interconnected webs, perhaps vast and complex webs, of indications of interaction possibilities. It is within such possibly vast webs that complex agents select and guide their interactions. I call such webs the agent's knowledge of its current interactive situation — or *situation knowledge*.

Situation knowledge is situation specific. It is ultimately conditionalized on the current situation of the agent. Even “distant” possibilities, such as opening one's refrigerator to get a drink are situated in one's current location, such that, for example, you might have to walk to your car and drive home in order for that possibility to become proximate.

Situations are constantly changing, and so also must situation knowledge. There must be a constant updating, maintenance, and filling out of the possibilities in situation knowledge. I call this dynamic flow of situation knowledge updating and maintenance *apperception* (Bickhard, 2009a).

In simple agents, the conditionalized set-ups of interaction possibilities, and the triggering among them, may be largely or entirely innate — there is no apperception. For complex situation knowledge in complex agents, these apperceptive processes must themselves be learned — there is nothing innate about knowing how to open refrigerators and obtaining a drink.

In passive models of agentic relationships to the environment, such as signet rings pressing their form into wax (transduction), or a scratching into the wax over time (induction), it is enticing to model learning as similarly a matter of the world pressing itself into the mind (induction writ large). If knowledge consists of knowing how to successfully interact with the world, however — if knowledge consists of the ability to apperceive successfully — then there is no temptation to model the mind as passive with respect to learning.

Learning must be a matter of construction — the mind must be an active generator. Moreover, unless those construction are prescient, such constructions of possible ways of apperceiving must be tried out and selected for their success or failure.

An action or interaction based model of knowledge requires a constructivism, a *variation and selection constructivism*. It forces an *evolutionary epistemology* (Campbell, 1974, 1990).

Furthermore, if new constructions can potentially make use of earlier constructions, perhaps using them as units or perhaps as frameworks for inducing variations, then such recursivity in construction yields various kinds of historicities in learning constructions. Such historic dependencies in constructions — both constraints and enablings — forms the subject matter of *development* (Campbell and Bickhard, 1992; Bickhard, 2006).

We now have the outlines of a model of the development of agency: it is an evolutionary epistemological constructive process generating further agentive capabilities, and, thereby, generating the development of the agent. Complex agents encounter a special kind of situation when encountering each other that forms the framework for the emergence of social ontology, and the concomitant emergence of social agency.

Social Ontology: Two or More Complex Agents

An agent must differentiate its environment in order to appropriately apperceive it — in order to set up appropriate situation knowledge. Kinds of interactions that are engaged in primarily for the purpose of modulating apperception, especially those that involve physiologically specialized systems, are called *perceptual*. Perception, then, is interaction of a specialized kind — interaction to modulate apperception.

Modulation of apperception succeeds, when it does, because situations are massively redundant. Differentiating interactions can support large scale updatings and modulations of situation knowledge. A visual scan of a rock, for example, (or a refrigerator) provides enough information to be able to anticipate many possible interactions that the rock might afford (Bickhard, 2009a; Bickhard and Richie, 1983).

There is a special class of situations, however, in which there is a reflexive indeterminacy of how they should be apperceptively characterized. These are situations

in which a complex agent is in the interactive presence of one or more other complex agents — social situations.

Part of the difficulty in apperceiving another (complex) agent is that much of the interactive potentiality that they afford inheres in their internal processes and conditions, and these are not directly perceptually available. There is, however, a deeper reason for difficulty.

In order for an agent to characterize a situation involving another agent, they must apperceive that other agent, but that the other agent is also apperceiving his or her environment, which includes the first agent. So, to apperceive a situation involving you, I must apperceive, among other things, your apperceptions of me, including my apperceptions of you, ... and so on in an unbounded potential regress.

In most circumstances (e.g., not involving deceit), there is a mutual interest in resolving this indeterminate reciprocity in apperceiving the situation, and, in this sense, the problem posed is a version of a *coordination problem* (Schelling, 1963) — a problem in which more than one mutually satisfactory solution exists, but in which arriving at any one of the acceptable possibilities requires some sort of appropriately joint activity on the part of the participants: joint complementary apperceptive characterizations and resultant activity, in this case.

Solutions to coordination problems serve as a model of *convention* (Lewis, 1969). In this case, such a solution constitutes a coordinative characterization of the situation, and is, thus, called a *situation convention* — a convention about what kind of situation the participants are participants in (Bickhard, 1980, 2009a).

Note that the situation characterized in a situation convention is largely *constituted* by the complementary apperceptions of that situation; it is the complementary factual relationships between (among) the various agents' situation knowledge that constitutes the situation convention being characterized. So, situation conventions constitute the ontological facts that situation conventions are about. Situation conventions are emergent in the relations among the apperceptive processes and situation knowledge resultants of the co-constitutive participants in those situation conventions.

One special class of situation conventions are those that are invoked via some generally accessible signal or procedure or situation, such as insignia of rank, calling a meeting to order, automobiles passing each other on the right, and so on. The power of such signals or procedures to elicit a convention is itself a matter of convention, but the broad accessibility of such means of invocation establishes the conventions as types that are potentially available over populations and times. These are called *institutionalized conventions*.

In contrast, the conventions involved in the mutual understandings of sentences in mid-utterance are likely to have never occurred before and to never occur again: these are non-repeated situation conventions — *linguistic situation conventions* in this case (Bickhard, 1980).

The Ontologies of Persons

All biological entities are agents at least minimally: they are constituted by interactive processes that are normative in the sense of contributing to the continuing existence of the process (Bickhard, 1973, 1980, 1993). Differing kinds of agents arise in differing forms of such self-maintaining processes, relative to the environments in which such self-maintenance is functionally successful (Bickhard, 2009a). Persons, so I argue, are special kinds of agents that arise in and are constituted in interactions with social and cultural processes, including other social persons, and thereby co-constitute the emergence base for those social and cultural realities.

Social processes emerge in the conventions among social agents, and those agents capable of participating in and thereby constituting social processes emerge in the *development* of individual biological agents as they become social agents. This is an individual level emergence, and is with respect to the society and culture within which the development occurs. As mentioned, such individual level emergence of social agents differs drastically from, for example, social insects, for which there is arguably a social emergence at the level of the nest or hive, but no developmental emergence at the level of the individual insects. Human infants are special kinds of biological creatures open to and adapted to such socio-cultural developmental emergence (Berger and Luckmann, 1966).

In this model, agents are constituted in their interactive dynamics; such dynamics is their ontology. They are not independent entities that might happen to engage in action, but organizations of self-maintenant process that are constituted in that process, and that cease to exist if those interactions cease — they *are* those (self-maintaining) interactions.

This is in strong contrast to, for example, a computational model of agency, in which the computational system may engage its environment, but for which there is no ontological necessity to do so. Computational systems are not constituted by their computational interactions.

Agents, then, are constituted in their interactive dynamics, and human infants that develop in social and cultural environments develop as special kinds of agents that participate in those environments. Those environments are themselves emergent environments, emergent in the social and institutional conventions and conventionalized processes that constitute those environments. Agents that develop to become participants, thus constitutive participants, in those environments are themselves, therefore, emergent kinds of agents — social agents: *persons*.

Language and Social Ontology

Social ontology is emergent in conventions and the processes involving and constituting them. There is a special class of conventions that forms a central aspect of these ontologies: language. Institutionalized conventions are constituted in the availability of conventionalized tools, such insignia of rank, for invoking those conventions. Some such convention-invoking tools can recursively modify each other, such as when the convention of a play changes the significance of the convention of a marriage ceremony, or when the conventional consequences of “good” modify those of “thief”. When the possibilities of such recursivity become productive — when the potentialities of such recursive constructions become unbounded — then the conventionalized tools that can participate in those invoking constructions constitute a *language* (Bickhard, 1980, 2007, 2009a). Language, in this model, is a socio-culturally conventionalized tool system for constructing utterances with conventionalized effects on

situation conventions. That is, language is socio-culturally available tool system for constructing, changing, and maintaining situation conventions.

In this model, language is a tool system for the dynamics of social interaction. This differs on a metaphysically deep level from standard conceptions in which words denote things or properties — the framework that has dominated language studies for millennia (Bickhard, 1980, 2007, 2009a). I argue elsewhere that 1) standard approaches to modeling language are at root incoherent, and 2) that a fully interactive-apperceptive model of language (there are a number of partial convergences with such a model in the literature, but none take the operative perspective to account for all of language) accounts both for standard paradigmatic “denotational” language phenomena as well as multiple aspects of language that are anomalous or inexplicable on standard accounts (Bickhard, 1980, 2007, 2009a, in preparation).

Situation conventions are constituted in the complementary relationships among the participants’ characterizations of the situation. Those characterizations, in turn, are constituted as anticipations of ranges of potential further interaction. With the emergence of language, much of those further interaction potentialities will themselves be potentialities of further conversation, of further “linguaging”. The potentialities that constitute human social realities, thus, are in major ways potentialities of language. So, language is not only a tool system for interacting with social realities — the potentialities of language constitute much of those social realities that utterances interact with. Language, thus, both operates on and constitutes social realities. Language potentialities, consequently, are also central to the ontologies of social persons (Bickhard, 2004, 2008, in press).

Developmental Emergence

How does the developmental emergence of ontologically social persons occur? What is the nature of the relevant dynamics? I will outline a model of one central aspect of this development — an aspect involving agentive *presuppositions* (language development, for example, will not be addressed here: see Bickhard, in preparation).

Consider first an infant learning to interact with a toy wooden block. There are many visual scans, manipulations, dropping, chewing, and other interactions that are

possible with the block. The infant learns not only (via evolutionary epistemological variations and selections) how to engage in such interactions, but also that any of them indicate the possibilities of any of the others: the web of interactive possibilities is internally completely reachable — any such possibility is reachable from any of the others. Furthermore, the infant learns that such internally reachable organizations of situation knowledge are invariant under an important class of transformations: the block can be thrown, put in the toy box, left on the floor, and the entire internally reachable web can be re-accessed by returning to the place where the block was left (unless someone has cleaned up in the meantime!). Organizations of internally reachable, relatively invariant, subpatterns of interactive potentialities become an important type of apperceptive possibilities in constructing situation knowledge.

Social interactions constitute a different kind of pattern of interaction possibilities. Central to such differences is the contingency pattern of the interactions. Playing peek-a-boo, for example, involves contingent interactions on the part of both infant and adult. These contingencies are in one sense similar to those for the toy block: engaging in one visual scan indicates that a particular manipulation of the block will bring into view another visual scan possibility. But a major difference between the two kinds of interaction patterns is that the current condition of the block is visually recoverable at many points (so long as the block is not hidden), while the current “state” of the social interaction is not. A currently ongoing conventionalized social interaction is in a current condition that is dependent on the immediately prior history of the engagement in that interaction. That current condition is constituted in the complementary anticipations of what will or could follow from this point in the unfolding of the interaction. That is, the current condition is constituted in the relationships among the participants’ characterizations of the situation that constitute it as a situation convention — and those relationships are not directly perceptually accessible. One of the special abilities of human beings is that of being able to keep track of such hidden trajectories of situational flow and change (Bickhard, in preparation).

Presuppositions and Roles

Anticipatory situation knowledge of such social practices involves various positions within those forms of practice that constitute “locations” for other contingent agents — occupiers of the relevant *roles* in the practices (Bickhard, in preparation; Berger and Luckmann, 1966). Learning to engage in such a practice requires not only learning how to engage in one’s own — one’s role’s — contingent interactions, but also learning to anticipate the contingent interactions of the other(s).

Such anticipations of further possible interactions involve presuppositions about the environments and environmental conditions: some environments will support such anticipations and some will not. Engaging in these anticipated kinds of interaction, or even simply having an anticipation of how things would go if they were engaged in, presupposes that such supporting conditions hold. This is so for the toy block: if the initial visual scan is with a hologram, then the supporting conditions for manipulations will not hold. And it is so for social practices: if the other agent does not manifest the “correct” contingent interactions, if the convention constituting the practice does not hold, then the anticipations of how the practice will go will be false.

These presuppositions are implicit, not something explicitly represented, but they constitute a realm of properties of fundamental importance. Elsewhere I argue, for example, that the truth or falsity of such presuppositions constitutes the realm of emergence of primitive representational normativity (Bickhard, 1980, 2009a, 2009b). Here the focus is on the kind of knowledge involved in being able to apperceive patterns with such presuppositions, particularly those of social practices.

The anticipations involved in being able to engage in a social practice, such as peek-a-boo, are anticipations of the contingent responses of the other that successfully continue the conventional interaction. They constitute, therefore, anticipations of the role that the other plays in that kind of interaction. This will be the case whether or not the infant or child (or adult) is able to actually engage in that *other* role in the practice, though being able to take that other role clearly involves more explicitly developed patterns of interaction on the part of the infant or child. The other role(s) in the practice, in turn, involve anticipations of the infant’s or child’s contingent activities. This is “just”

the filling out of the point that situation conventions are solutions to the coordination problem of characterizing the other's characterizations of self, including one's own characterization of the other, and so on.

This structure of reciprocal interactive anticipations is what enters the child into the social world, and the development of the ability to engage in practices with such reciprocal interactive anticipations is the emergence of social agency. These abilities are learned and developed via constructive processes that “seek” success in interaction, just like abilities to interact with toy wooden blocks. But social interactions are special in that 1) they can be of enormous complexity, 2) they are inherently unfolding in time, and not easily recoverable at a given moment if that historicity has been missed or misperceived, and 3) they are conventionalized sedimentations of social and culture historic processes that have undergone their own evolution in the history of the culture and societies involved (Bickhard, in preparation; Berger and Luckmann, 1966; Humphrey, 1976). They require keeping track of the temporal flow of the unfolding of the conventionalized interaction. As these institutionalized forms of interaction become more and more complex, temporally extended, and with greater ranges of possible splitting of interaction trajectories, they require greater and greater abilities to be able to engage in them. Language, of course, enables and introduces enormous complexities. Human beings belong to a species that has evolved to be adapted, thus adaptive, to such “hidden” historic complexities.

The Social Self

As the infant and child develop abilities to engage in social practices, including specific communicational interactions that may not be fully institutionalized in the broader society (though they might be institutionalized for the pair of the infant and caregiver), they *ipso facto* develop more and more complex implicit presuppositions concerning the presuppositions of others about their own roles and manners of engaging in those roles. This can become even more explicit if other roles in the patterns or forms of interaction — the practices — are at times *explicitly* taken up by the infant or child. It is this development of both implicit and explicit knowledge of societies' presuppositions concerning one's own participation in social realities that constitutes a central aspect of

the “position exchange” process in social development (Martin and Gillespie, in press). Social development, in this manner, intrinsically involves the development of at least implicit, and increasingly explicit, understandings of others’ views of one’s own position, and others’ expectations concerning one’s own manners of carrying out those positions.

Developing as a social person, thus, intrinsically involves developing at least an implicit sense of how one’s self is taken by others. It intrinsically involves coming to have a self, and to have an implicit understanding of that self — implicit in the abilities to interact with situations involving the presuppositions of others about ones’ self.¹

Normativities of Social Ontology

There are numerous social normativities that are emergent in the ontology of social processes, and I will here outline a few of them. First, insofar as social conventions are solutions to coordination problems, the normativity of participants’ interest in arriving at one of the fixed point solutions — arriving at a convention — is a fundamental normativity, an instrumental normativity, in the nature of coordination problems. But social normativities go much deeper than that.²

The normativities that I will focus on here are those that arise from the fact that participating in social processes intrinsically involves presenting oneself as a legitimate, competent, reliable social agent with sufficient integrity to be able to be counted upon to carry out the forms of interaction at issue — as trustworthy. Furthermore, it involves being accepted as such by others.

These self presentations are implicit early in development, but may become at least partly explicit later. In some cases, there may even be an explicit deceit in such self presentations, and/or acceptances.

Participating in social processes, thus, involves presenting oneself as a co-constitutive member of that society, and having those presentations accepted. There is a strong stake involved in these presentations and acceptances: they are necessary to functioning as a social being, and, thus, ultimately to existing as a social being, as a social person. Without such acceptance, the social ontology of a person is denied. I would suggest that herein lies the power of such practices as shunning and exile.

These presentations of self as a social agent, and their acceptances, are rarely explicit, though they may be — as when someone presents him- or her-self as a legitimate performer of a marriage ceremony. The basic form for self-presentations, however, is presumptive: an agent begins interacting in such a way as to presume some conventional frame for the interaction, including for their position in that frame. So long as others proceed within the presumed frame, they have implicitly accepted not only the conventional form, but also the person as having a particular position in that form, and, thus, the person as a social agent in general.

With reflection on such processes, presentations and acceptances can become explicit. The individual can also develop values concerning such person-properties, such as integrity, reliability, competence, legitimacy, and so on. At times, such values may explicitly contradict the presuppositions of lower level presumptive interactions, such as will be the case for crucial interactions of a spy: as a spy, or con-man, I may undertake presumptive interactions regarding social agent properties that I intend to be accepted, but to be false.

There is a still deeper stake involved: insofar as a social person has developed as being constituted as a social agent in this society and culture, the ontology of that person is constructed on massive presumptions of being and being accepted as such a social agent. It is such presumptions that may become explicit in higher order values (Bickhard, 2006). But, if those presuppositions of one's basic ontology come to be challenged, or, worse, refuted or denied, then that constitutes a challenge, or worse, to (the presuppositions of) that person's very existence as a social being. There is no deeper ground for existence as a social being than such presumptions as are involved in engaging as a social being, so these constitute a necessary aspect of the ontology of social persons. Social persons, then, can have a fundamental existential stake in those presupposed characteristics. And, insofar as they become explicit, they constitute the core of a person's sense of self, and of whatever they value about their self.

Social Ontology and Ethics

The normativities involved in the social ontology of persons extend into considerations of ethics, and I will outline one of those central implications: Insofar as

the ontology of personhood is intrinsically social, then functioning or developing in ways that distort or stunt that social ontology is a violation of one's own ontology, a distortion or stunting of one's own potential as a person.

This notion of potential violations of one's own intrinsic ontology has echoes of Aristotle's notion of the "function" of human beings, and of ethics as involving full realization of that function (Barney, 20008; Darwall, 2003). And this framework similarly has strong convergences with notions of ethics based on virtue and character (Bickhard, 2011). The ontologically social-person framework differs, however, in that fulfillment of the potentialities of a social ontology is not a function or purpose; rather, violations of that ontology are intrinsically in error with respect to that ontology. There need be no further purpose on top of that ontology; the ontology is already, intrinsically, normative. 'Reason' is one aspect of this ontology, but it does not constitute the function or purpose of social being.

There are two differentiable aspects of this point concerning distortions of social being. One is that some ways of being are more fulfilling than others, as fulfillments of social ontological possibilities. And another is that some ways of being preclude others: becoming a person who enjoys torturing others precludes becoming a person who can fully appreciate closeness with others. So, the possible errors are not just in terms of current modes of functioning, but in terms of modes and directions of development as well.

But current modes of being *are* current modes of developing: development occurs as a historic aspect of the processes of being. So ethical choices involve not only choices of actions and interactions, but also of directions of development, and of kinds of developing (Bickhard, 2011).

Conclusion

Persons are emergent natural processes in the natural world. They are emergent as biological agents in general, and social agents in particular. They are not biological computers that gather social data and that happen to compute actions. Interacting with their environments is constitutive of the ontology of persons, both as biological beings

and as social beings. Interaction is internally related, not externally related, to the nature of persons (Bickhard, 2009a).

Social realities are themselves emergent in the forms of interaction among persons, and persons, thus, constitute the emergence base for social ontology. Persons develop within each individual, and constitute a individual level emergence of the kind of agent that can participate in, and thereby co-constitute, the society(ies) and culture(s) that that person has developed in. Persons, then, are emergent relative to their biological bodies; they are an entrance into the social realms around them.

The social ontology of persons is intrinsically normative, in multiple ways. These normativities involve a person's stake in being the social-ontological person that they have become, and extend to considerations of ethics as a fulfillment of the possibilities of such social ontologies — or of intrinsic errors with respect to those ontologies.

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Endnotes

¹ With the advent of the ability to engage in reflective thought, at about age 3.5 to 4 (Allen and Bickhard, in press; Bickhard, 1992), these implicit senses of self can become unfolded into explicit self representations (Bickhard, 2004, 2008).

² Some have argued that the Lewis model of convention cannot account for any deeper normativities (e.g., Gilbert, 1989). This may or may not be correct, but the model presented in the text differs in crucial ways from Lewis's, and arguably does account for deeper normativities (Bickhard, 2008).