The role of ontologies in family science

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Abstract

A number of social and family scientists have insisted that there are problematic ontological choices that family researchers must make explicit in their research. Focusing on the arguments of critical realists, I approach this insistence by relating ontological questions to the structure of theoretical systems, which for a given research study can involve one or more elements of the theoretical system, from highly abstract theoretical orientations through contextual theories to concrete or conceptual descriptions to data. Two ontological claims by critical realists are critiqued, that researchers must accept ontological realism to develop good explanations, and that social explanation requires a specific substantive “ontology” that rejects much of currently accepted social explanation. The critical realist claim that research should be based on ontological realism is shown to have little or no impact on family research. The emphasis on explicit theoretical logic is laudable, but the promotion of a specific substantive critical realist ontology appears counterproductive.

Introduction: Ontology

Ontology is the philosophical quest to determine what we can know, that is, what is knowable, what is Real.¹ Ontological questions ask whether a given “thing” in the world or in family science is “really” a Real thing (Tsilipakos 2012). In other words, are things like families or love Real? If things are Real, then they Exist independently of what we may think about them. Gravity, it can be argued, existed as a natural force before Newton described it. Love was an important family process even in the 1950s and 1960s when virtually no social scientists entertained those concepts. Love may be real to someone who has experienced it, but is it Real even for those who have never experienced it or even who don’t believe in it?

A number of writers on social science methodology (King, Keohane and Verba 1994, Martin 2001, Rosenberg 2016, Tollefsen 2014), including some at TCRM (Bengtson et al. 2003, Burr 2009, Knapp 2007, Marks, Burr and Day 2011, Olson 2010), have insisted that there are problematic ontological choices that family and other social science researchers fail to make explicit in their research. They have argued that researchers need to be explicitly aware of the ontological assumptions of their research. “[B]ecause social scientists often attribute causal powers and properties to social groups, social ontology and the philosophical debates within social ontology are of great importance to the social sciences” (Tollefsen 2014:141). Thus the first claim is that social scientists have not taken explicit ontological positions. A second claim is that social scientists have nevertheless taken implicit positions on ontological issues: “all social scientists take sides on the problems the [ontological] positions reflect, whether they want to or not” (Rosenberg 2016:42); “… one does not have the option to remain neutral” (Baronov 2012:15). I refer in this paper to the philosophers and social scientists who make claims for the

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¹ Because the term ”real” is used in multiple senses, in this paper I will indicate those things that are claimed to be ontologically Real with an initial capital letter.

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importance of ontology in the social sciences as “social ontologists.” In particular, I will examine the arguments made by philosophers and social scientists who are identified as critical realists. Social science research is about how the world works, and ontology is about what the world consists of, so there is a *prima facie* case for the importance of ontology. At the same time that social ontologists, especially critical realists, have called for an expanded role for ontology in social science, practicing social scientists have routinely been ignoring this call. Does it matter to family science whether researchers take a position on ontological questions? After all, a person can drive a car or fly in an airplane without knowing how internal combustion and jet engines work. This is because highly competent physicists, chemists, and engineers have developed the tools for building and operating effective cars and airplanes. One could argue that if I fly in an airplane, I have implicitly committed myself to aerodynamic theory, but I will still get to my destination if I am completely ignorant of physics, refuse to think about it, or even reject it entirely. In a parallel way, is it possible that sophisticated theorists and methodologists may have developed ontologically appropriate techniques for conducting effective family research so the rest of us can just use them?

In this paper I ask whether the social ontologists’ claims of necessity and implicitness are valid. First I investigate two ontological positions important to the ontology of research, realism and nominalism. Next I describe elements of the theoretical system on which explanation in family science is built. Third, I bring these two themes together and describe critical realism, a school of thought recently developing a following in the social sciences that gives a great deal of attention to ontological issues. Finally I evaluate critical realism’s claim for the importance of realism and evaluate its recent proposal of a particular complex “substantive ontology” for social science.

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2 This is the claim of “implicit realism,” which I will consider below.
Realism

Ontological questions would seem to be important to the work of family scientists, who seek to know the motivations and constraints of family life. When you refer to your mother, there appears to be no ontological problem with accepting that she is Real because she has material presence. On the other hand, when you refer to your family as a group of persons or more problematically to your family culture as a nonmaterial set of ideas, there are ontological questions about whether your family or your family culture are fundamental elements of Reality. Are they more than just ideas we have? One of the philosophical approaches in ontology is realism. Realism is the ontological position that there is a Reality out there that we perceive imperfectly. Realism asserts that groups like families or concepts like love or family culture are Real. From the realist perspective, our sciences attempt to provide explanations of the world we experience and do so by attempting to describe Reality. One of the contentions related to the centrality of ontology to family research is that good explanations “require ontological realism” (Porpora 2015:34). That is, it is said, a good explanation has to connect to Real things and use Real concepts.

Since theories are propositions containing concepts and since all concepts have their referents (pick out features held to belong to social reality), then there can be no social theory without an accompanying social ontology (implicit or explicit) (Archer, cited by Tsilipakos 2012: 209).

In other words, the concepts in our theories cannot be “just ideas.” For a realist, to have an idea of a concept is to claim that the concept is Real (Risjord 2014), to claim to know the nature of Reality (Hempel 1952). “Ontological realism is the acceptance of a single, ontologically objective [R]eality common to us all and independent of human thought” (Porpora 2015: 67).
“When we ask about something’s ontological objectivity, we are asking about its existence independent of us” (Porpora 2015: 16).

For objects and concepts, realists and all ontologists ask about Reality. For explanation, realists ask about Truth (Risjord 2014). It is one thing to assert that a chair is Real, or a family is Real, or love is Real. It is more complex to consider whether it is True that a partner’s praise influences the childcare that fathers perform, or self-interest causes condom use, or frustration is a reason that leads a person to choose aggression, or love is a reason that a person may choose to sacrifice for a partner. From the point of view of realism, a True theory will use Real concepts and describe Real processes. “The fundamental premise of realism is that theory has a ground in the basic structures of the social” (Reed 2011:39).

An important companion to ontology is epistemology. Epistemology, the question of how we can be sure we know what we think we know, is equally of critical importance as family scientists select research methods to help them learn about family life and communicate it to others. The only epistemological principle I will be concerned with is the Fundamental Epistemological Principle. This principle notes that all knowledge comes from our perceptions, and all perceptions are fallible. Our perceptions are often mistaken and can be systematically biased by both how we are biologically wired (Hanson 1958) and by how we are socially and culturally conditioned (Bourdieu 1984). What we think we see or what we imagine behind what we see are never certain. If there is a Real world, we can never know it for sure.

If there is a Reality, then we can ask how well our theories correspond to Reality. Porpora (2015) distinguishes “alethic Truth” from epistemic truth. The distinction is that alethic truth is the way the world Really is, while epistemic truth is the best we can understand with our fallible instruments and conceptions. Or, as Kant would say, the noumenon that is Real is revealed to us only in the phenomenon that we perceive. Because of the Fundamental Epistemological
Principle, alethic Truth or *noumenon* can never be known; we cannot definitely know what is Real or True. However, we are not completely ignorant of Reality. After all, Reality “talks back” to us. “As we revise our frameworks in response [to evidence], we arrive at epistemically better conceptions of the world, conceptions that are more in line with the world's back-talk” (Porpora 2015:75-76). Alethic Truth may be unknowable, but surely by continued approximations we can come closer and closer to Knowing Truth. As this argument indicates, ontological realists have an optimistic view about the existence of and our access to Reality. Realists, while recognizing that they cannot know for sure the nature of Reality, nevertheless find it useful to believe that a specific Reality exists. With such an (unverifiable) belief, the realist can argue that successive contextual theories are closer and closer approximations to Reality. Using an example from physics, when an apple falls from a tree, Aristotle would have said that apples fall to the ground because that was their natural place. Newton said that gravity is a force that pulled objects (apples or heavier objects and Earth) together. Einstein said that gravity was a curvature of space that directed objects toward one another. Thus a realist would be likely to argue that Newton’s explanation is more True than Aristotle’s, and Einstein’s is more True than Newton’s.

**Nominalism**

Given the Fundamental Epistemological Principle that we can never Know Reality, what is the alternative to realism? An alternative to claiming that one’s concept corresponds one-to-one with an aspect of Reality is to make no such claim. Nominalism (Hempel 1952) holds that the concepts we use in our theories stand on their own and do not depend on corresponding with Reality. Note that not claiming X is not the same as claiming that X is false. Being an agnostic is not the same thing as being an atheist. Nominalism in this sense is not really in opposition to realism; nominalism simply refuses to be concerned about Reality, since what is Real is unknowable anyway. Although Porpora (2015:170) claims that “Nominalists deny the [R]eality...
of abstract objects,” a nominalist researcher would be likely to “neither confirm nor deny” the Reality of a given concept.

Thus for a nominalist, “family” is a term that one may use to refer to persons in particular theoretical or observed relations to one another. This formulation makes no claim that in the Real world there is a Real family. Nominalists recognize we have no way to verify that a concept is Real. So they do not try. A nominalist researcher who conducts research using family concepts claims only that those concepts are useful in research and meaningful in explaining what happens in the family. Considering again the case of gravity, from a nominalist point of view each version of physics should be evaluated on its own terms (Meehl 1986). Aristotelian physics, Newtonian physics and Einsteinian physics are different, but there is no general answer to which is better. Aristotelian physics kept people from standing under heavy objects or falling off cliffs (actually, they did not need Aristotle for this cautious behavior, but in his time he provided a sensible explanation of the dangers). Einsteinian physics is better for astrophysics; Newtonian physics is better for the physics of building and flying airplanes. Even NASA, it is said, uses Newtonian physics for sending rockets to and around the moon.

Take the nature of love. If love is a nominalist concept, it is reasonable to consider my conception (Bell 2010), Plato’s conception (Plato 1952), Singer’s conception (Singer 1984-1987), or someone else’s as separate, different concepts of love. But if one is a realist, one must ask which of these conceptions (if any) can be considered to correspond to Reality (Hempel 1965). Is there only one Reality, or does each of the different conceptions of love have its own Reality. The question of whether or not something like love is a Real attribute of Reality (realism), or simply a name we give to an idea we find convenient to understand the world (nominalism), is an interesting metaphysical question, but it is not clear how different answers would lead to different explanations or different research methods.

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The theoretical system

If we are to consider the relation between explanation and Reality, if any, we need to consider the full complexity of the theoretical systems by which we construct explanations. I will avoid the unqualified term “theory,” because it has too many meanings (Klein and Janning 1997, Merton 1957, Ward 1974). Instead, I will use “explanation” for the general concept of making meaningful statements about how families work and use more precise, often compound, theoretical terms for specific types and levels of explanation. A major goal of family research is to construct social explanations at those various levels to understand the world in and around families.

In considering the nature of explanation, it is important to recognize is that every explanation (unlike “understanding” as described below) has a “because.” For some kinds of explanation the “because” is causal.

For husbands with a traditional view of marriage, the less successful they feel as a provider the greater the probability they will abuse their partner, because frustration (inability to control the partner as implied by tradition) leads to aggression in an attempt to regain control.

This is a causal explanation. For some other kinds of explanation, the “because” refers to choice.

A husband with a traditional view of marriage may abuse his partner because asserting [or choosing to assert] control lets a traditional husband validate his identity as masculine.

This is an interpretive explanation. Explanations have multiple layers or levels relative to abstraction and specificity (Bell 2009, Bell 2016, also see the earlier similar conceptualization by Hage 1972). I will distinguish four levels of the theoretical system (see Bell 2009 for a more complete analysis): theoretical orientation; contextual theory, conceptual description and concrete description.

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Theoretical orientation

Theoretical orientations are abstract non-falsifiable ways of thinking about the world (Bell 2009). Theoretical orientations are sometimes referred to as formal or generic theory (Glaser and Strauss 1975, LaRossa 2012), abstract laws (Turner 1991), general laws (Reed 2011), grand theory (Parsons 1951), theoretical systems (Hempel 1952), paradigms (Kuhn 1970, Ritzer 1975) or ontologies (see discussion below). When a researcher refers to a “theory” that is not falsifiable, then we may be sure they are referring to a theoretical orientation (e.g., evolutionary “theory,” ecological “theory,” rational choice “theory,” attachment “theory”). Theoretical orientations are fully abstract processual ideas with no empirical content. For social science, it is the researcher’s proposed claim about what are the important concepts and processes that allow explanation of human behavior.

A theoretical orientation is completely abstract. It may be formulated as general or universal (e.g., referring to all human or corporate actors, “the more power an actor has the more the actor will coerce others, because coercion is expected to achieve increased rewards”). However, a theoretical orientation may also be more restricted (e.g., referring only to some actors within a particular kind of social context, “for a subordinate actor with no ability to escape, the greater the opportunity to avoid detection the more the actor will attempt to sabotage commands from the superior, because reducing rewards to the superior provides psychological rewards to the subordinate”).

Rational choice “theory” is a family of exchange, power, and reinforcement theoretical orientations that imagine how fully self-interested imaginary actors might act in the absence of any other motivations (Bell 2009). The rational choice family of theoretical orientations asks us to think of purely rational actors, abstractly imagined with no other motivations. I say “no other motivations” because the orientation does not describe any other motivations, so we are not
justified to add anything else. An ontological issue is whether a human being is such a rational actor. For a realist, a theoretical orientation and its concepts describe Real processes and concepts. For a nominalist, the theoretical orientation and its concepts are seen to be useful, helpful, and meaningful in making sense of the world.

The completely abstract ideas of a theoretical orientation obviously developed historically as a way to make sense of specific grounded observations. But now they are conceptually independent of that history. Researchers who believe a theoretical orientation is applicable to phenomena in a particular social context may use it explicitly or implicitly to inform contextual theory (below). The contextual theory may then be researched to determine whether the logic of the theoretical orientation applies meaningfully in that social context. It is a researchable (and falsifiable) question whether a construct like rational choice is a major (seldom the only) motivator in a particular social context. Family researchers may explore the social contexts of the family in which people are more rational (family investments for example) or less rational (marriage and divorce decisions for example), and the variations in cultural and personal history that shape these inclinations.

The observation that concept A is associated with concept B can give ideas about what goes together in the world, but it is not in any way an explanation. Instead, I will use “The more A the more B because…” as a prototype for an explanation, where the because clause lays out the explanatory logic or mechanism (Bell 2009).3 Obviously, most family researchers do not restrict their explanations to the grammatical form of the canonical prototype, but it would seldom be difficult to express explanations in the canonical form. The causal explanation prototype is generally employed to investigate the causal antecedents of variable concept B. The research

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3 The “The more A the more B because…” form of a theoretical orientation is an advance over the more primitive “If A then B” covering law prototype often described by philosophers like Porpora or Hempel. The covering law prototype not only treats the world as consisting of either-or dichotomous events. It also omits any specification of process or mechanism.
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Table 1. Theoretical Orientations

<table>
<thead>
<tr>
<th>Causal Form (rational choice)</th>
<th>Interpretive Form</th>
</tr>
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<tbody>
<tr>
<td>The more an actor expects to be rewarded for a given behavior, the more the actor will enact that behavior, because enacting rewarding behavior will increase the actor’s expected rewards.</td>
<td>Actors who want to influence relationship partners may choose to offer rewards to the partner to achieve that influence, because of a cultural belief that reward is a useful motivator. Alternate interpretive theoretical orientation for the partner in the relationship: Actors who are offered a reward by a partner to perform a behavior may choose to perform the behavior if the reward is sufficient and greater than the effort to perform the behavior.</td>
</tr>
</tbody>
</table>

question generally takes the form “What explains B?” In the standard “the more A the more B, because…” formulation, the focus is to specify the As that explain the level of B. The because clause of a causal theoretical orientation states the proposed causal understanding of how more of varying concept A causes more of varying concept B. An abstract causal explanation of rewarded behavior is given in the first column of Table 1.

In addition to causal theoretical orientations, there are interpretive (or consequence) theoretical orientations (Bell 2016). Two related examples of an interpretive theoretical orientation are given in the second column above. In general, an interpretive theoretical orientation emphasizes how actors use values and meanings to make decisions. Interpretive theoretical orientations are often focused on how a person deals with a problematic situation (in the example given, how to deal with a partner who is not performing a desired behavior). They emphasize strategies that a person or other entity chooses to achieve desirable outcomes to respond to a difficult or uncomfortable situation. Instead of looking for cause as above, the interpretive researcher wants to “identify the reasons that make a particular action justified, intelligible, rational, meaningful, or somehow significant to us” (Rosenberg 2016:98).
Interpretive explanations are reason-based. “Reason-based” refers to the subjective reasons for behavior. Interpretive explanations are often concerned with determining the consequences of event A. What are the interpretations or the reasons based on the person’s emotions, history, understanding of the situation, and strategies that lead a person to respond to event A by enacting one or more decisions to perform actions B: B1, B2, etc. (Charmaz 2014, Corbin and Straus 2015). In this form of research, the research question takes the form “What reasons and decisions flow from the problematic condition A; what are the Bs that result from A?” In the area we are considering, the interpretive researcher might be interested in how actors in a relationship influence one another’s behavior. In this case, reward is one of the ways one partner may influence another. A major difference in the two types of contextual theory is that the causal contextual theory is associated with a theoretical orientation that has an emphasis on cause that is external to the person, while the interpretive contextual theory derives from a theoretical orientation with an emphasis on internal choice.

Theoretical orientations in the canonical form can be considered to be “law-like statements.” Note that they are “law-like” but not laws. They state completely or almost completely the abstract logic of social phenomena (or noumena!). Note also that as described above theoretical orientations are abstract and not necessarily universal. Some of these abstract logics have been accepted by the vast majority of family scientists. For example, “people are rationally self-interested” expresses an unfalsifiable belief among most social researchers. Even if we find a context where self sacrifice occurs (see the discussion of contextual theory below), most will still believe in general that self-interest is an important way to understand people (at least in certain contexts). Some who hold firmly to rationalist theoretical orientations will even go so far as to deny the reality of altruism or self sacrifice by finding a way to reclassify the sacrifice as self-interest (Coleman 1990, Elster 1989). It is important to note, however, that for most of the
others, rationality is not the only theoretical orientation they accept. One may suggest that a theoretical orientation expresses a nominalist’s view of explanation as a useful imagining or expresses a realist’s use of imagination to construct a view of abstract Reality.

Contextual theory

A rationalist theoretical orientation may describe the logic of perfect rationality, but it is always a researchable and falsifiable claim that rational logic is applicable to any given social context. Contextual theories can be seen to be applications of the logics of theoretical orientations to classes of social situations (Bell 2009). “Explanation … is the logical result of combining a general law about social life with particular circumstances” (Reed 2011: 5). Contextual theory is a causal or interpretive explanation of the actions of a category of persons (or other kinds of entities like families) within a social context, what is often referred to as middle range theory (Merton 1967) or substantive theory (Glaser and Strauss 1975, LaRossa 2005). Contextual theories may be deductively constructed from a researcher’s preferred theoretical orientation. Or an inductive researcher may find that a theoretical orientation helps to organize and conceptualize observations to create a contextual theory. For example, from the power theoretical orientation one may project a power theory of marriage that applies one of the power logics to the social context of marital interactions (Blood and Wolfe 1960, Rollins and Thomas 1975); or an attachment theory of childhood that applies the abstract logic of trust to the social context of children responding to a caregiver’s reliability (Bowlby 1982, Mikulincer and Shaver 2007); or a network theory of HIV transmission (Friedman et al. 1999), which applies network structure ideas in the context of transmission of disease.

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4 I would say “abstract law” rather than “general law” because a theoretical orientation may not be generally applicable to every person and context. A theoretical orientation about vampire motivations may not be applicable to any living person.
Because contextual theories propose to apply the abstract logic of theoretical orientations to a specific social context, contextual theories are falsifiable: the proposed abstract logic may or may not be detectable in the particular social context. The idea of power as expressed in the direct power, indirect power, normative power or other power orientations cannot be falsified, but the claim that one of these power processes occurs at a detectable level in Hopi sibling relationships or mixed-race dating relationships is testable and falsifiable. Although one can construct a rational choice theory of behavior during a fire in a theater, any rational behavior might be submerged in more existential motivations like fear. People may be self-interested under such conditions, but for many the self interest may not be rationally directed.

The abstract logic of the causal reward theoretical orientation is applied in the first column of Table 2 to the social context of fatherhood to propose an explanation of one source external to the father that encourages childcare. The abstract logic of the interpretive theoretical orientation is similarly applied in the second column to partners who wish to encourage childcare in fathers (the alternate interpretive contextual theory applies its logic to the fathers who are encouraged). The cause in a contextual causal theory is an assertion that the imaginary causal process of the theoretical orientation can be used to make sense of behavior in the proposed context. The transition from theoretical orientation to contextual theory applies the abstract imaginary logic of
a theoretical orientation to a particular social context to create a contextual theory that can be tested and either supported or refuted. Or the transition may go the other way if a researcher notes commonalities among a number of contextual theories and uses those commonalities to imagine a new theoretical orientation. Note that the grammar of the contextual theory is identical to that of the theoretical orientation with contextual entities and concepts substituted for the abstract entities and concepts of the theoretical orientation.

For simplicity, I have described theoretical orientations and the contextual theories associated with them as single sentences. Obviously a complex contextual theory can have multiple sentences and each sentence can be associated with a different theoretical orientation. Because each theoretical orientation describes a different abstract logic (the logic of exchange is different from the logic of power or the logic of caregiving), the contextual theories that we develop from them can employ multiple explanatory logics, with each logic providing a partial explanation.

Concrete description

Concrete descriptions are the first link between data and contextual theories. Concrete descriptions come in two versions: hypotheses and empirical generalizations. In some cases these two versions can be almost identical in form. Empirical generalizations are summaries of previous observations; hypotheses are summaries of expected observations. Contextual theories cannot be tested directly because they contain unobservable concepts abstracted to apply across at least one social context. The researcher desiring to test a contextual theory specifies how each abstract concept in the contextual theory is to be measured by an observable variable within a specific research study and the resulting hypothesis predicts how the variables will be related. Thus hypotheses are the reformulations of causal or interpretive contextual theories in terms of summary statements that describe the concrete observations that the theory predicts in the setting of a specific research study. Hypotheses are usually written in future tense. Empirical
generalizations are very much like hypotheses except that they flow “up” from the data rather than “down” from contextual theories. They also are general statements that summarize a researcher’s observations in a research study. Methods of grounded theory and similar approaches allow for the transition from data captured in codes and categories to empirical generalizations about such data (Charmaz 2014).

Note in Table 3 that the elements in a concrete description are descriptions of observable or observed behaviors. Because concrete descriptions are built around observations, there is no because clause; causal and internal reasoning processes are not observable. Except for the because clause, the entries in Table 3 have the same grammatical structure as those in Table 2.

**Conceptual description**

Conceptual descriptions are a slightly more abstract form of description. As seen in Table 4, conceptual descriptions replace observable variables or codes in a concrete description with non-observable concepts. In these statements, the directly observable “positive statements” is conceptualized as the more abstract “praise” and “time playing with child” is generalized as “giving childcare.” The conceptual status of receiving praise depends on the researcher’s abstracting from observable positive statement to the more abstract and general concept of praise.
(Charmaz 2014, Corbin and Straus 2015). The resulting statement is still quite close to the raw observations, but it is now referencing abstract concepts (praise, childcare) that were not directly observed (observed positive statements by the partner were interpreted by the researcher as involving praise rather than criticism; observed time with child was interpreted by the researcher as involving care rather than exploitation). Whereas the concrete description noted conceptualization to observed variables and events (Charmaz 2014). This process of conceptualization creates an association between observed positive statements and time playing, the conceptual description has added an implicit causal connection between praise and childcare (for the causal antecedent version) or an implicit interpretive connection (for the interpretive consequence version). While observing positive statements does not cause observing time playing, there is a sensible causal connection between praise and childcare, or a sensible interpretive connection between praise and the choice to perform childcare. To make a distinction, one may use the term “understanding” to refer to those situations where we have an implicit unstated awareness of things for which we do not have a clear explanation. An understanding is a tacit explanation, but by being unstated the communication between author and audience is more uncertain.

Note that the conceptual descriptions like concrete descriptions, do not include a because clause. If the conceptual descriptions in Table 3 are connected to their respective contextual theories, then there will be an explicit explanation for the predictions or observations. However, if there is no explicit contextual theory, the conceptual description can provide an implicit understanding. As a tacit understanding, however, the conceptual description depends on what the reader or listener already knows. That is, it depends on the reader/listener’s existing cultural background. As such it has equivocal value as explanation because different audience members may interpret the claim differently because of their different backgrounds and social positions.
Thus, shared understandings depend on already existing shared backgrounds. When offering a conceptual description as an implicit understanding, the researcher should recognize that the explanation is liable to be understood accurately only by an audience that shares the researcher’s social and cultural background. Barring shared culture, I may understand that a partner offers praise out of a genuine appreciation of the father’s efforts, but you may understand it as a cynical attempt by the partner to manipulate the father, and another person may understand that fathers are simple creatures with a Pavlovian response to praise. One may question whether it is legitimate for the researcher to claim to have communicated “an” explanation unless there is an associated contextual theory.

Theoretical orientations describe imaginary abstract causal or interpretive mechanisms without context; they cannot be falsified themselves, but they are used to guide the construction of testable contextual theory. A contextual theory is a testable claim about how the world works in some social context (as in a general explanation of the behaviors of parents and children or a more limited explanation of the behaviors of parents and adoptive children in a particular ethnic group). That is, the context can be completely general or highly specific. Such contextual theories may be supported or not supported in research studies. Conceptual descriptions or concrete descriptions can be derived from contextual theories to test these theories or they can be

<table>
<thead>
<tr>
<th>Causal Form</th>
<th>Interpretive Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>The more the observed fathers in the study received praise from their partners the more they gave childcare to their children.</td>
<td>Partners in the study who wanted greater childcare from the father reported offering praise to encourage childcare.</td>
</tr>
<tr>
<td></td>
<td>Alternative conceptual description: Many fathers in the study who were praised by their partners reported choosing to increase childcare of their children.</td>
</tr>
</tbody>
</table>

Table 4. Conceptual Description
developed out of observable data. Concrete and conceptual descriptions are observation statements that do not involve cause or interpretation; they are always by definition purely descriptive. In some cases an empirical generalization (e.g. in qualitative research) can be hard to distinguish in form from hypotheses derived from a contextual theory except for tense: empirical generalizations in the past tense summarize collected observations; hypotheses in future tense summarize expected future observations.

Critical realism and ontology

One of the major movements emphasizing ontology in social science is critical realism. Critical realism is a school in the Kuhnian sense (Kuhn 1970) that has insisted on the importance of ontology in social science (Archer 1985, Cruickshank 2003, Porpora 2015). There are three aspects to their insistence on ontology that are particularly important.

Critical realism as realism

First, critical realists have, as their name suggests, made a commitment to the ontological position of realism. Critical realists have used their focus on realism to differentiate themselves from those with other philosophical positions (Cruickshank 2003). Critical realists distinguish their own ontology from that of postmodernists (who are seen to claim that all explanation is just opinion) by emphasizing that Reality talks back, so proposed explanations can be compared, albeit imperfectly, with fallible observations of Reality. In this way they believe that their explanations become progressively more True. Thus, their proposed explanations are more than just opinion. Critical realists differentiate their ontology from constructivists (who are seen to claim that there is no independent standard to evaluate proposed explanations) by claiming that Reality’s back-talk provides a standard that is, while fallible and approximate, adequately

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5 The realist claim that explanations become necessarily closer and closer to Reality should be evaluated in light of the multiple epicycles that medieval astronomers conjured in order to try to approach an ellipse with circles on circles (Bell 2009, Coleman 1967).
independent of the researcher’s biases. Thus, while each researcher may have their own perspective, Reality provides a common standard against which to compare explanations.

For critical realists, then, contextual theories are intended to capture Reality. The theoretical orientations with which contextual theories are associated must in this view capture the abstractions of Reality. The imaginary logical constructions of theoretical orientations are intended then to be a one-to-one match with Reality. There is an “implicit realism” argument among critical realists that if one has an explanation related to families, one must, even if one doesn’t recognize it, believe that families are Real, and if one has an explanation about praise as a motivator, one must implicitly believe that praise is Real and has Real effects.

One complication with this realist view of theoretical orientations is that nominalists also create theoretical orientations, and they reject the “implicit realist” view. A nominalist recognizes a range of uses for concepts beyond claims of Reality. Boolean theory in mathematics, Jonathan Swift’s “modest proposal” to control high birthrates by eating babies, and the anthropological study of the “Nacerima” (Miner 1956 or just about any U. S. introductory sociology text) are examples of conceptualizations that were never intended to represent Reality (although Boolean algebra unexpectedly gained a physical Reality with the development of diodes and computers). Fiction authors have also imagined theoretical orientations in order to describe consistently and coherently how zombies or vampires or witches and warlocks might act. They do not claim that these ideas represent Reality. By the “implicit realism” argument, J. K. Rowling, author of the Harry Potter series, and perhaps her readers must “implicitly” believe that magic and magicians are Real; Leonard Nimoy of Star Trek and perhaps his audience must “implicitly” believe that Vulcans are Real. Is a rational choice theorist being dishonest if she uses rational choice models but doesn’t believe that humans are always perfectly rational?
Another realist complication is the concept of a singular Reality. If a theoretical orientation focuses on a single causal or interpretive process, does a realist accept each separate theoretical orientation as an aspect of Reality, or does a singular Reality require a single comprehensive theoretical orientation? Critical realism’s critical stance and singular conception of reality have led Margaret Archer (below) to dismiss partial explanations in favor of a totalizing theoretical orientation.

Critical realism’s view of theoretical orientation as substantive ontology

The second aspect to critical realists’ emphasis on ontology is that, beyond the commitment to realism, critical realists are developing their own specification of the substantive content of Reality, what may be thought of as a “substantive” ontology. Archer’s (2003) version of critical realism describes a complex theoretical orientation that interactively combines social structure, culture, and individual agency (Archer 1985). In Archer’s critical realism theoretical orientation, actors as agents have personal identities; they have three motivations (physical well-being, competence, and self-worth) which they prioritize through life as they are constrained by structural emergent properties and cultural emergent properties. Archer thus proposes an arguably non-falsifiable view of how social science should explain the world. As defined above, a theoretical orientation is a non-falsifiable way of thinking about the world, so this definition appears to apply directly to Archer’s proposed ontological theoretical orientation, which seems to be among the most well developed among critical realists. Further, as we look at Archer’s project, we can see that it is still largely an outline of a comprehensive theoretical orientation to explain social life. At this point, it does not yet seem to have discernable because clauses to

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6 It is confusing to use the term “ontology” both for the general philosophical question of how to pursue the explanation of social life (realism, nominalism, other choices) as well as substantive theoretical orientations used to propose the explanatory logic of Reality. I will refer to these explanatory logics as theoretical orientations, and mostly restrict the term “ontology” to the general philosophical questions.
specify the content within the general outline. Much of the critical realism project from this point forward seems to be directed at the development of the abstract conceptualizations for this theoretical orientation.

Some critical realist social ontologists insist that critical realist explanation can only be developed through qualitative methods (e.g., Archer 2003). I am convinced that this is thought necessary because critical realism has proposed such a complex theoretical orientation that no one feels comfortable prospectively formulating each of the separate processes implied by the critical realist project. Since critical realist researchers are still largely unclear as to identifying the specific causal and interpretive pathways by which structure affects agency and vice versa, they do not yet seem ready to propose any substantive contextual theory. Therefore, they appropriately propose formative research using qualitative methods.

Critical realism as critical

The third aspect of critical realism’s philosophical project, in addition to realism, is an emphasis on being “critical” (Cruickshank 2003). One element of being critical is political and moral: critical realists believe they should be oriented toward active intervention and making the world better. But the second element of this critical stance is that critical realists use their focus on criticism to mean that they feel obligated to dismiss and contend against all other theoretical orientations (Cruickshank 2003). This critical rejection of competing frameworks is seen in Archer (2003). Looking at an individualist rational choice family of theoretical orientations and a structuralist family of theoretical orientations, Archer (2003) feels that she has to completely jettison both before she can formulate her own theoretical orientation.

A fundamental problem with critical realists’ tendency toward identifying theoretical orientations as ontologies lies in the association of ontologies with philosophy in the sense of a tendency in philosophical discourse to disputation in either-or terms. This tendency seems to
have led Archer to reject, for example, rational choice theoretical orientations because they (appropriately) only focus on rational behavior (individuals’ maximization of rewards). It is certain that in the development of critical realism’s project of relating structure and agency, the insights gained from rational theoretical orientations and substantive theories will be important. Certainly critical realists are not going to end up claiming that people never maximize their rewards. One source of this disputatious trend in critical realism seems to be the framing of competing theoretical orientations as “assumptions” and “presuppositions” (something postmodernists have also done frequently). When a theoretical orientation is seen as a presupposition (e.g., Cruickshank 2003), it is represented as fixed and permanent and thus as not useful for theoretical development. When a theoretical orientation is seen as an “assertion,” rather than an “presupposition,” then theoretical orientations are easier to view as open to critical evaluation and thus as developing ideas. By framing explanatory issues as ontology and then framing ontologies (theoretical orientations) as fixed “presuppositions,” critical realists seem to be denying the flexibility of theoretical orientations. As I have shown elsewhere (Bell 2009), theoretical orientations seen as related to Kuhn’s paradigms (Kuhn 1970), develop through “epicycles,” small but significant change (as from direct social exchange to implicit social exchange: Bell 2009), as well as “revolutions,” large disruptive changes in theoretical orientation. Framing theoretical orientations as “suppositions” (“I suppose…”) rather than “presuppositions” makes clearer the flexibility and responsiveness of theorizing at the theoretical orientation level.

Another problem with this critical stance is that it interferes with accepting multiple causality. That is, Archer rejects individual-level explanations that leave structure out of their purview and rejects structural explanations that leave out individual agency. There are a very large number of theoretical orientations represented within the literature on the family (e.g., Bell 2009). Each one
provides a partial logic that can be applied to various social contexts such as the family, and each can be tested for meaningful application in these contexts.

For any contextual rational choice theory (e.g., about dating partners), the explanation is only partial. For one thing the contextual theory is only about daters, so it makes no claim about rational action in any other social context. Daters are only seen as rational while dating, and even then only partially rational. In statistical terms, the R-square of actual studies is invariably quite a bit less than one. Thus any one contextual theory only explains some of the variation in its focal concept. For example, if we construct a gendered social power theory of marital interaction (Bell 2009), there will be some number of husbands who are very strongly motivated to coerce their wives by threat of withdrawing resources. There will be other husbands who have some motivation to do such coercion but who are also motivated by other strong motivations to love and care for their wives or to follow norms of reciprocity to share burdens. There will be still other husbands who have close to zero motivation to coerce their wives and other motivations will govern their marital interactions. And there will be still other husbands who are coerced by their wives.

Each theoretical orientation brackets all other theoretical orientations, so it is logically although obviously not empirically separate from these others. Archer’s intention to discard partial theoretical orientations because they are not complete will eventually founder because at least some of these orientations will turn out to be highly informative in her complex developing superstructure. If any given theoretical orientation is seen as capturing only a part of Reality (i.e., every theoretical orientation is limited in what it covers and where it applies), then multiple theoretical orientations and the contextual theories derivable from them can be compatible exactly because they are separate. Every person and every relationship can be seen as including “incompatible” elements (I am selfish and I am loving). While a single overarching theoretical
orientation is a laudable goal, its construction will have to take into account much of previously
developed theoretical orientations as well as new theoretical orientations that are developed out
of ongoing and upcoming qualitative and quantitative research. It may eventually be feasible to
have a well worked out complex unitary ontology/theoretical orientation that covers everything
social; but I don’t recommend holding one’s breath. In the near term, family and social science
will be well served to continue using theoretical orientations they know as well as developing
new (partial) theoretical orientations to flesh out Archer’s outline.

Summary and discussion

In summary, I conclude that social ontologists, including critical realists, have presented
important ideas about the development of explanations in social and family science. However,
the sometimes strident and—may I say it—often dogmatic approach to ontology may have been
misplaced—or at least oversold. It may be questioned whether the discussion of ontological
issues “engenders anything but continuing confusion” (Tsilipakos 2012: 202). A relevant
question is “Does it make a difference to research practices in family science whether family
researchers adopt a realist ontology to guide their theoretical and methodological choices?” In
fact, it may be suggested that the emphasis on ontology in recent literature on social and family
science is not meaningfully about philosophical ontology at all. The first proposal of critical
realism, the insistence that researchers must adopt realism as a fundamental principle, is
relatively harmless and has few meaningful implications for the conduct of research and theory
building.

Kuhn has shown that science is sociological. Critical realists might call it political. That is to
say, anyone may produce research, but whether that research has effects in the world—both
practical and scientific—depends on whether the audience is persuaded (Fuller 1988). Research
is accepted when it is persuasive. The goal of a researcher who wants to have an impact is to

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persuade the audience of one's explanation. For the nominalist, one persuades by showing persuasively the meaningfulness and usefulness of one's explanation. For the realist, one persuades by demonstrating persuasively the Truth of one’s explanation. Both usefulness and Truth are established by the same agreement between research results and theoretical prediction (Bell 2016). But “there may well be no common currency for measuring progress” (Shweder and Fiske 1986)

Quantitative researchers use validated scales and statistical analyses to persuade. Qualitative researchers use thick description to persuade. The differences in what is considered persuasive do not distinguish realists from nominalists. Quantitative realists and quantitative nominalists will both use persuasive statistics. And qualitative realists and qualitative nominalists will both use thick description for persuasion. In the end, both realists and nominalists agree that there are limits to what we can know, so whether improved explanations are closer to Truth as realists claim or more useful as practical understanding as nominalists claim, it doesn’t actually make a difference in what we do with our explanations (Meehl 1986). A practicing researcher can easily be indifferent to the contending claims of realism and nominalism.

The second proposal by critical realists, that all social researchers should adopt a single unified critical realist theoretical orientation, while also harmless (because it will be ignored by most non-critical-realists), is misdirected. The tendency for critical realists to present their theoretical orientation as an “ontology” has had a couple of salutary outcomes. An advantage of ontological language has been that, by cloaking a theoretical orientation as an “ontology,” authors have been able to write about and publish their work in outlets that might have been less friendly to “abstract theorizing.” In addition, to the extent that the current interest in ontology leads to greater attention to theoretical orientations, then the project of family science will be benefitted. Thus I take the advocacy of ontology to be a recommendation that family and other
social scientists be more open and explicit about the theoretical orientations that underlie their contextual theories. I commend that advocacy.

Less salutary has been the tendency to describe the emerging critical realist theoretical orientation as an “ontology,” especially in conjunction with the “critical” emphasis on disputation against and dismissal of other theoretical orientations. By presenting their complex theoretical orientation as an authoritative “ontology,” critical realists have presented this project as a fixed “presupposition” or “assumption” that arbitrarily excludes the results of much previous social research. While describing a goal of open-ended qualitative research within the outline of a very complex theoretical orientation, this project has denied major parts of the vast existing family literature.

Theoretical orientations and substantive ontologies are not zero-sum. A researcher who studies how social structures cause individual behaviors should not be considered inherently wrong because another researcher shows how the individual also makes choices that contend with and eventually modify the social structures. Structural and agentic theoretical orientations and ontologies can both persuasively provide meaningful explanations, separately as well as together.

References


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