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# Destabilizing Social Communication Theory

*Colin B. Grant*

**T**HIS ARTICLE seeks to conceptualize social communication as a complex operation in uncertainty and argues that existing interaction accounts are unable to construct a theory that is both sufficiently sensitive to uncertainty in cognitive and communication terms<sup>1</sup> and able to reconcile such uncertainty with theoretical accounts of collective knowledge, consensus-formation or integration. Existing interaction accounts are heavily influenced by an interaction paradigm which continues to predominate in social communication models to this day and – under the influence of such varied theorists as Mead, Bakhtin, Husserl, Schutz, Luckmann and Habermas – to inform much of the human and social sciences.<sup>2</sup>

Taken at a weak, intuitive level of extension, the concept of interaction is unproblematic: people interact all the time. However, this is not the end of the story, since the term is more often than not accompanied by strong claims. It is taken as a synonym for generalized modes of interaction, and often modelled as dialogue, dialogism or exchange of meaning.

These models raise some key issues discussed outside communication studies *strictu sensu*, for example, in social theory and logic, and are often based on notions of symmetry and even correspondence. This article argues that it is at this point of transition from intuitive notions to generalized models where problems relating to the theoretical conceptualization of interaction emerge. For it is at this point that intuitive beliefs are all too often reified.

The central argument presented here is that, however defined, the interaction concept has changed little since the emergence of the semantic of interaction, remaining within transcendently normative theories. Furthermore, despite the more recent diversification of communication

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theories into theories of dialogism, constructivism and uncertainty, conservative interaction theories display a remarkable resilience and obscure some relevant questions. This article seeks to examine the implications of interdisciplinary communication theories for our intuitive understanding of interaction as a social process (see Grant, 2000b).

The following ideas represent an interdisciplinary approach to communicative interaction which extends to cognition, communication and context, or the embeddedness of the social situation. This approach is far from being eclectic, however, for questions relating to the implications of a complex understanding of communication can best be answered with interdisciplinary instruments:

[E]rstwhile certainties of meaning transmission, stability, duality or dichotomy, identity and difference can be challenged and theoretically modelled in new contexts. Interdisciplinarity is one means by which to illuminate this complexity from several sides in the pursuit of theoretical blind spots in the field of critical communication studies. (Grant, 2001c: 7–8)

The first section – Aporias of Social Interaction Theories – conducts a critical examination of transcendental notions of intersubjectivity and normative theories of dialogism with the implied reciprocity of relations among actors which, from the outset, tend to foreclose a consideration of the role of uncertainty in social communication. Rather than positing such theories as rational or even counterfactual ideals, this chapter, following S.J. Schmidt, introduces the concept of the fictionality<sup>3</sup> of social communication in order to achieve a better understanding of the connection between several levels of uncertainty and social stability.

The second section – Uncertain Communication: From Entropy to Porosity – presents a communication theory that takes uncertainty seriously. This is best achieved by making use of concepts taken from diverse disciplines. These include information theory, vagueness theory and constructivist theories of communication since these are, in certain important aspects to be explored below, more sensitive to the precariousness of communicative interactions. A modified concept of entropy in the sense proposed by Shannon and Weaver (1964) is introduced at this point and enriched by semiotic and cognitive considerations.

In the third section – From Referential Semantics to Self-reference: Some Implications for Communication – key differences between the concepts of reference and self-reference will be explored. Since constructivists see reality as an observer-dependent category, reality can be described as *contingent*: it depends/is contingent on the person doing the observing after all. In a social-theoretical sense, the concept of contingency is a paradox, involving contact and thus dependency (consider the verb *contingere*) but also risk, since this contact depends on a context that cannot be determined in advance. If realist claims are dropped and cognition and communication conceived as self-referential, then self-reference occupies an important position in a theory of unstable communication.

Section Four – Excursus: From Vague Logic to Vague Semiotics – deals with the logical concept of vagueness and relates its core concepts to social communication theory in order to enrich the modelling of the complexity of communication in terms of a philosophy of language. Here, vagueness theories prove invaluable in underpinning a philosophical approach to the contingency of communication. Unlike a logical theory of vagueness, however, which stresses that there is always a distinction between truth and falsehood, the modified vagueness concept proposed transfers the context of discussion to the level of social function. Vagueness is thus not seen as the result of the ignorance of man about the world, but derives from contingencies of communication and cognition. In social terms, society determines *ex post facto* whether or not something is true or false. Thus, even vague signs can operate normatively.

Section Five – Rules, Norms and Social Fictions – builds on the concepts of cognitive closure, uncertainty and semiotic vagueness by considering the implications of such multiple contingencies for society and the way in which society operates. The whole point of a theory of semiotic appeal is to re-examine social communication without recourse to universalistic or rationalistic models which suppress autonomy in the name of normativity. To recognize social communications as fictional or constructed is to reveal the ways in which norms are actually made.

### **Aporias of Social Interaction Theories**

As mentioned above, part of the problem in prevailing social communication theories can be found in the tendency to reify notions of dialogue and relate them to intersubjectivity. This often results in a series of strong epistemological and cognitive claims. The origins of the concept of intersubjectivity can be found in Husserl's critique of the Cartesian ego – with its conflation of the transcendental *cogito* with the psychological self – and proposal for a dynamic relation between phenomenon and consciousness. By constituting the importance of the phenomena around it, the subject relates itself to a perception of the phenomenon as other. The orientation to the other enables the subject to overcome its isolated monadic status:

Only by starting from the ego and the system of its transcendental functions and accomplishments can we methodically exhibit transcendental intersubjectivity and its transcendental communalization, through which, in the functioning system of ego-poles, the 'world for all', and for each subject *as* world for all, is constituted. Only in this way, in an essential system of forward steps, can we gain an ultimate comprehension of the fact that each transcendental 'I' within intersubjectivity (as co-constituting the world in the way indicated) must necessarily be constituted in the world as a human being. (Husserl, 1997: 185–6, emphasis in original)

Husserl was not considering such concrete interaction structures as the family, Church or friendship, but the reasons whereby various subjects can

perceive an object intersubjectively. Intersubjectivity acquires transcendental status in so far as such others constitute a ‘monadological community’ of different selves.

Within the shadow of phenomenological intersubjectivity theories Linell’s discourse-theoretical framework for a ‘dialogical theory of misunderstanding and miscommunication’ reveals much about the aporias of dialogical interaction theory. His dialogical/dialogistic<sup>4</sup> model is seen to stand in opposition to what he terms the monological model, which is based on a model of communication as transmission via a conduit. Since such monological communication models were outdated and in need of revision, the dialogical approach certainly introduced much-needed plausibility. However, the dialogical interaction concept has succumbed to its own type of conservatism in replacing one communication model with another based on strong intuitive claims. Here, the use of the concept of intersubjectivity as closely related to the dialogical model exposes the passionate belief in the new model which renders it blind to deeper implications of communication as an unstable process: ‘Understanding and misunderstanding (in discourse) concern degrees of intersubjectivity and are therefore pertinent to mutualities in dialogue’ (Linell, 1995: 177); and ‘misunderstanding clearly presupposes some (lack of) intersubjectivity’ (1995: 208).

Admittedly, the loose association of the concepts intersubjectivity, mutuality, shared knowledge and understanding may be politically attractive in the name of inclusionary politics, but too often theoretical models break up into normative intuition. As a result, where the monological approach is rightly criticized for its gross simplifications, the dialogical model proposed in its place is over-simplified on a series of cognitive and communicative grounds, and its core concepts – dialogism, intersubjectivity, reciprocity – are easily reified:

The speaker is assigned the status of interpretive authority when it comes to the meaning of his/her own utterances. But this holds most unambiguously for reference, not necessarily for descriptive (or other aspects) of meaning. In other words, the speaker knows what the intended referents are, but s/he may be mistaken in her/his choice of words for describing them. (Linell, 1995: 180)

Habermas has argued that by following Husserl, Thomas Luckmann, for example, could not go beyond the phenomenological lifeworld concept. In other words, common knowledge is simply affirmed without due regard for the communicative practices which construct it. As Habermas sees it, this aporia can be avoided by replacing a phenomenological method with a communication-theoretical method since the former fails to grasp the regenerative communicative energies of the lifeworld. According to Habermas, the lifeworld is composed of a ‘context which constitutes the horizon and processes of understanding among social actors, a reservoir of assumptions and organized cultural values’ (1995a: 590–1, my translation). Actors in the lifeworld, unlike actors in the system, communicate rationally

without seeking to impose their views. The lifeworld is thus reconceptualized on a communicative-theoretical basis of rational validity claims and rational communicative action. Even if this rational communicative action proves exceptional, its normative force is rooted in its role as a counterfactual ideal.

The theory of intersubjectivity, dialogism and Luckmann's theory of collective knowledge are very much representative of the dominant interaction paradigm. This semantic of interaction, as Luhmann has called it, was idealized in Enlightenment thought in Kant's principle of the public use of Reason and in the performance of the resolution of religious conflict through discourse in Lessing's *Nathan the Wise*:

The semantic of interaction laid down in the 18th century is concerned with a person-to-person relation. At the same time, it *interprets* itself as a model of society . . .

. . . an understanding of interpersonally enriched reciprocity is no longer compatible with functional needs and forces the retreat of interaction theory into communality. (Luhmann, 1993: 153, 122, my translations and emphasis)

Communicative interaction, in other words, should not be taken for granted. Equally, it should not be superficially denied or comfortably dismissed either as monologues or as dialogism, for neither understanding of interaction offers an adequate account of the uncertainties of communication.

Such uncertainty is a result of complex relations between speaker and speaker, speaker and worlds, and also of the fact that meanings of communication do not correlate with the semantic processing of the simultaneous cognition operations of social actors (as Luhmann [1997, vol. 2: 814] argued, consciousness processes cannot be controlled by communication). Dirk Baecker (1999a: 54) makes a similar point in his reflections on the inescapable ambivalence of communication when he argues that ambivalence is the precondition for the fact that participants in communication are not determined by communication but gain selection opportunities through communication.

The tendency to operate with concepts such as dialogue, exchange of meaning, or even dialogism, intersubjectivity or consensus, introduces at worst a binary aspect into an understanding of communication processes or, at best, unproblematic assumptions about social relations and social stability itself. Equally, normative theories of innateness or rational predisposition in communication must remain less sensitive to the construction of communication in society and to the role of constructors in making and negotiating these communication codes:

Irrespective of the cultural background, all participants know intuitively too well that a consensus based on conviction is not possible without symmetrical relations between the participants in communication – relations of reciprocal recognition, reciprocal adopting the stance of the other, reciprocal imputed

willingness to see one's own traditions with the eyes of an outsider and to learn from other etc. (Habermas, 1999: 332, my translation)

If the communication model is altered on the basis of different assumptions such as instability or contingency, then these claims can be challenged or reformulated in a way that is still socially meaningful. As a result of these considerations, the interaction concept will be recast with a different theoretical model without recourse to realist philosophy, rational communication theory or theories of intersubjectivity:

To Searle's appropriate question 'How does it all hang together?', the response will not be an inappropriate (dogmatic) recourse to realism, but to social need. Society 'hangs together' fallibilistically on the basis of functional fictions (in the sense proposed by Schmidt, 1994, 2001). (Grant, 2000b: 131)

The conceptualization of social communication processes as fictions derives from the cognitive autonomy (Schmidt, 1994) of speakers who clearly cannot gain access to the cognition of their communication partners, but rely instead on their communications. Schmidt, in advancing his theory of cognitive autonomy, is at pains not to disconnect such autonomy from the social realm, however, and thus refers to social orientation as the pragmatic ecology without which a cognitive system would become involuted. By means of operative fictions of collective knowledge (the term fiction is used here since it is only ever collective knowledge as a social construction), the cognitive autonomy of social actors is communalized (Schmidt): 'understanding is something like a useful fiction' (in H. Vaihinger's use of the word).<sup>5</sup> We presuppose understanding in order to assume that communication is reasonable, because we assume that other people 'think' (Schmidt, 1995: 322–3). The equivalent of such an environment in communication theory could be the concept of context:

Social fictions also operate as complex pragmatic fictions by means of recursively linked communications and thus build stable social orders through culture as a socially obligatory semantic instantiation of world models. (Schmidt, 2001: 11)

If communication is always a negotiation between uncertainties and the need for organization, then the concepts of identity, understanding or mutuality can only ever be imputations, and yet precarious and necessary imputations at the same time. The uncertainties in communication thus need to be reduced by elaborate *fictional* codes constructed to simulate or impute 'shared knowledge'.

The construction of a destabilized theory of social communication acknowledges contingency on three levels: cognition, communication and society. By recognizing social interaction in terms of its functioning and without recourse to the concepts of intersubjectivity, dialogism or consensus, real epistemological, and potentially empirical, gains can be achieved in

operating with the fictionality of the constructs of social interaction. In other words, in this conceptualization of social communication based on cognitive autonomy, solipsism at an individual level or atomism at a social level are not inevitable corollaries: uncertainties in communication are negotiated for purposes of social interaction by means of fictions which, as social constructions, are contingent.

### **Uncertain Communication: From Entropy to Porosity**

As will be shown below, vagueness in social communication terms, with its emphasis on the instability of any referential operation, can be made productive for a theory of complex communication according to which cognitive and social contexts of use, reference and meaning remain inevitably porous.

As will be argued below the concept of entropy in an information-theoretical sense means uncertainty or, in the classical Shannonian definition, the 'rate of generating information' (Shannon and Weaver, 1964: 58). The most statistically regular processes, or 'ergodic processes' reduce randomness in communication: 'Ergodic systems, in other words, exhibit a particularly safe and comforting sort of statistical regularity' (Shannon and Weaver, 1964: 12).

The more organized the communication, the lower the entropy. When entropy is lowered, so, too, is freedom of choice and when freedom of choice is lowered, information becomes predictable. If entropy is a factor of uncertainty as opposed to redundancy then it can be seen as the correlate of uncertainty in the domain of cognition. The question is how this entropy can be stabilized:

In the limiting case where one probability is unity (certainty) and all the others zero (impossibility), then  $H$  [information] is zero (no uncertainty at all – no freedom of choice – no information). (Shannon and Weaver, 1964: 15)

It seems that the concept of entropy and cognitive autonomy go hand in hand since one refers to uncertainty in communication whereas the other asserts cognitive uniqueness.

In Shannon's sense, meaning is certainty and thus closely related to redundancy in communication. Since his model deals essentially with discrete forms, the task here will be to enrich the entropy concept in pragmatic-semiotic terms and thus make it useful at the level of social communication theory. Uncertainty in communication can then be related to recognition of greater contingency in the relationship between communication and its environments, which includes other speakers.

From within the information-theoretical approach, Jumarie extends Shannon's model to the realm of semantics in order to introduce greater sensitivity into the examination of the 'coupling effects which necessarily exist between symbols and meanings' (1990: 2):



[F]or sufficiently large values of  $n$  [the number of preceding words – CG], we switch from the space of words to the space of sentences, that is to say, loosely speaking, we move from symbols to meanings. (1990: 5)

It is important to remember that Shannon's theory of communication is explicitly concerned with statistical structures. Questions of meaning are not, therefore, considered relevant and entropy is conceptualized in syntactical terms. This criticism of the semantic poverty of Shannon's model (see also Baecker, 1999a, 1999b), which betrays its origins in information engineering, is of clear relevance to social communication theory. However, the deficiency of Shannon's model in terms of any use in the human and social sciences is not its syntactical bias, since Shannon deliberately set out to examine discrete sources. The problem is that Jumarie proposes a shift to the level of the sentence, which amounts merely to a shift in structural complexity and not necessarily a gain in terms of semantic sensitivity. If, as Luhmann argues, the signs we use to communicate are contingent, then semantics are not simply predetermined by structures, but also by the symbolic function of those structures in the constantly renegotiated contexts of subjects, institutions, systems or societies. Jumarie thus conflates two levels in his critique.

In a more complex communication model, which goes beyond discrete characters Shannon had in mind, semantics cannot be ignored. Equally, communication as a social operation cannot be reduced to semantic or semanticist models and it must integrate the uncertainties of semiotic and pragmatic dimensions of communication agents. In Luhmann's terms:

Each participant knows for himself and of others that fixed forms of linguistic meaning are selected contingently (thereby continually confirming the fact that it is only a question of 'signs'). What can be perceived acoustically or optically and can therefore also be distinguished, is subjected to a second mode of selection. The 'material' of language itself is so formed and perceptible only in this form; but it is also occupied with references which function independently of their environment and thus permit repeated use. Thus, linguistic signs are and can always be different. (Luhmann, 1997, vol. 1: 211, my translation)

Karl Bühler's account of the appeal function of language is also instructive here. His triadic language model, with its consideration of the expressive and appellative functions of language, can be made useful in conceptualizing communication as fundamentally appellative in a radical sense. According to Bühler's famous organon model, language enacts three 'semantic functions': expression (*Ausdruck*), representation (*Darstellung*) and appeal (*Appell*).

The last named function (etymologically derived from *appellare*) is to be stressed here. The language sign is 'a *signal* by virtue of its appeal to the hearer, whose inner and outer behaviour it directs as do other communicative signs' (Bühler, 1990: 35). The concept of linguistic appeal is intended to be

a revision of the term ‘triggering’ in the sense of a triggering of reactions and in analogy to sex appeal (1990: 35). The concept is conceived as being less deterministic than the rather behaviouristic term ‘triggering’. Crucially, it focuses on the role of the person to whom the appeal is being directed: ‘in human and animal communication with signs it is the appeal that first and most exactly becomes evident to the analyst, namely in the behaviour of the receiver’ (1990: 38). The concept of appeal is used here in a more complex sense inasmuch as the capacity of the sign to direct reception is seen as modest at best. Appeal, then, is taken to be *an open-ended communicative sign*.

In telegraphy, noise is a disturbance in the channel that the information engineer sets out to resolve. In social communication theory, noise is introduced by the arbitrariness of communicative relations with the addressee(s), since cognitive autonomy means that signs can only ever operate as an appeal. Since this relation introduces instability, communication can be said to be uncertain; ‘messages’ are always unstable.

Building, *mutatis mutandis*, on the information-theoretical distinction between meaning and information and constructivist insights, the concept of communicative porosity is introduced here as a refinement of informational entropy, ‘structural’ accounts of the infinite iterability of language (see Derrida, 2000), but also as a critique of transcendental accounts based on intersubjectivity, consensus or dialogue. In order to illustrate the interdisciplinary utility of the concept of porosity and its connections with theories of vagueness, this section will briefly reconstruct its current usage in those fields in which it most frequently occurs. These fields appear remote at first sight.

The concept of porosity is predominantly encountered in studies of porous media in geophysics and biology. In geophysical analysis:

[A] porous medium is defined as a portion of space that is occupied *partly* by a persistent solid phase (= the *solid matrix*) and *partly* by a *void space*, the latter being occupied by one or more fluid phases. (Bear and Bachmat, 1984: 5)

Since the concept cannot be crudely imported from the geophysical modelling of porous media into reflections on social communication, it will be necessary to consider some of these physical properties before returning to communication processes. In other words, a simple operation in analogy<sup>6</sup> is not proposed here. Rather, the aim is to explore *the use of the concept in terms of its formal and epistemological implications*.

It is important to observe that in a porous medium, solid and fluid properties *interact*. In terms of biological dynamics, the classic example of a porous structure is thus a membrane or open isothermal lattice system. It is worth emphasizing here that (1) the system in question is open and (2) its structure is a lattice.

It is interesting to note in passing that in one of the first accounts of the

complexity of social communication, *Pragmatics of Human Communication*, Watzlawick et al. saw open human systems as complex in analogy with Moiré patterns: ‘optical manifestations of the superposition of two or more lattices’ (1967: 125, my emphasis). What is striking here is the fact that they did not take this complexity further. In other words, their concern was to view the instabilities of communication networks as somehow resolved in a consideration of ‘ongoing interactional systems’ which are ‘characterized by stability’ (Watzlawick et al., 1967: 129); the formal analogy with lattice systems is not taken further.

It would be wrong, however, to see the proposed focus on instability as a denial in shape or form of social cohesion or communication. Rather, the intention is to work towards a theoretical model that is more sensitive to deep complexity and does not presume stability of interactions, relationships, conventions, rules, institutions or systems. There are thus similarities between the relationship between the solid matrix and fluid phase in geophysics, and the biological dynamics of an open lattice system such as a membrane.

In a theory of social systems, systems operate to preserve their stability, despite the potential degeneration caused by uncertainty. To this end, institutions are endowed with codes or discourses and semantics. Semantics operate as stabilizers of vague signs: ‘Languages enable us to codify the relation between the uncertainty and the meaning of a message (that can be expected to contain the information)’ (Leydesdorff, 2001: 42).

In social communications systems, uncertainty is recursively fed back into the system for the purposes of stabilization. Since they are actually defined by communications, social systems are environmentally open and thus remain sensitive to environmental instabilities such as challenges from legislatures, coups d’état, public opinion or inadvertent leaks or even mendacious gossip. Instabilities are reduced by closed and self-referential semantics, which orientate meanings for social actors (see Luhmann, 1997; Schmidt, 1994). But these very self-referential semantics are also subject to uncertainty: nothing offers warranty for their survival other than their functionality as communications. This explains why social systems come and go in terms of the utility of their functioning (cf. also Baecker, 1999a: 52–9).

In terms of form then, the concept of porosity in communication-theoretical terms thus signifies an environmentally open hybrid *state and dynamic process* which, in turn, makes the operational closure of systems highly unstable. Examples of hybridity in communication terms can be seen as intertextuality, the confluence of private and public discourses, hacking, viral and virtual communication and so forth (cf. the varying accounts of Baecker, 1999a; Derrida, 2000; Lacan, 1975; Luhmann, 1997).

Porous communication consists of a solid matrix which ranges from syntactical constraints to complex social codes, and a void space. In this void space, signs are vague, cognitive processes unique and contexts indeterminate. Thus, the concept of porosity implies the contingency of structure and the contingency of interactions with a fluid environment. In

communication, the void space is not occupied by fluid phases, but by silence and such silence is paradoxically part of communication:

The systems reference of communication is no longer that of the ‘heads’, that is of ‘communicating’ individuals, but that of the social system. The social system is occupied with nothing more than probing and using ambivalence and, from case to case, deciding for one or other possibility without ever definitively opting for one or other possibility. (Baecker, 1999a: 58, my translation)

And yet porosity is more complex than Baecker’s ambivalence concept and is also a much more *contingent* concept than the structurally defined notion of iterability as the capacity for written language to be continually repeated and modified:

My communication must be repeatable – iterable – in the absolute absence of the receiver or of any empirically determinable collectivity of receivers. Such iterability – (*iter*, again, probably comes from *itara*, other in Sanskrit, and everything that follows can be read as the working out of the logic that ties repetition to alterity) structures the mark of writing itself, no matter what particular type of writing is involved . . . (Derrida, 2000: 7)

By contrast, the emphasis here is on a more general modelling of the instabilities of communication processes in society rather than the structures of repeatable texts. Here, context and communication must be enhanced by cognition-theoretical questions such as cognitive autonomy. As noted above, this does not mean logical vagueness or the impossibility of distinguishing between true and false (bivalence), but the theoretical approach to social communication as a system of *vague signs appealing to someone somewhere sometime* (multivalence). As Lacan expressed it: ‘*contingence du signifiant, routine du signifié*’ (1975: 39).

The concept of porosity is directly related to the concept of entropy. Whereas the concept of entropy is a useful starting point in the study of uncertainty, it arose in information theory in engineering, which was uncoupled from the *agents of uncertainty*. Porosity, by contrast, extends to the relations between speakers in the *complexity of communication in an environment of noise*. The role of the agents of communicative uncertainty is crucial. In terms of social communication theory, the use of the entropy concept – the uncertainty in communication as a source of information – implies that society builds on unstable or, in Derrida’s terms, polycontextual structures (see also the definition of polycontextuality in Luhmann, 1997, vol. 1: 36f.).

### **From Referential Semantics to Self-reference: Implications for Communication**

It might be intuitively felt that unless there is some kind of cognitive disturbance, ‘our’ perceptions establish and maintain contact with ‘reality’,

thus enabling 'us' to make statements about that reality with some certainty: 'I see you', 'Those trees are green'. A philosophical realist argues against the sceptic that to doubt the existence of external reality ('Do you see me or do you think you see me?') is to adopt a counter-intuitive stance ('Everyone knows those trees are green'). The relationship between our perceptions and reality is understood, in realist terms, as a relationship of some form of reference to an objective world. In other words, assertions are taken to refer, and even correspond to an external reality.

The question of reference is relevant here given the aim of this article to reconceptualize social communication. Admittedly, even critics of crude correspondence theory retain a belief in referential semantics. Putnam, for example, argues 'that there exists a unique *natural* mapping of sentences onto sets of possible worlds' (1997: 74). Mapping is a looser concept than correspondence in the sense that it relates not to precise relations of equivalence, but rather to the relations between sentences and sets or ranges of possible worlds. Despite the wider extension, however, the concept of mapping is far from implying fictionality in the sense proposed here; even if the 'concept is not exactly correct . . . that does not make it a *fiction*' (Putnam, 1997: 197, emphasis in original). Putnam remains committed to realism since 'concepts which are not strictly true of anything may yet refer to something':

If a number of speakers use the word 'electricity' to refer to electricity, and, in addition, they have the standard sorts of associations with the word [. . .] then, I suggest, the question of whether it has 'the same meaning' in their various idiolects simply does not arise. (Putnam, 1997: 201)

Thus, stability of reference comes about pragmatically, that is, through use. Although Putnam acknowledges the fact that meanings are constructed pragmatically and is therefore apparently compatible with the theory proposed here, it remains disingenuous to suggest that the question as to whether references have the same meaning 'does not arise'. Admittedly, there may be plausible pragmatic reasons for adopting such a position, for example, so that social interaction can be observed as taking place smoothly. However, this interaction remains precarious precisely because there is no guarantee that my use is the same as yours. That the difference may be suspended for pragmatic communication purposes may well be true; it is nonetheless equally the case that there is no guarantee that meaning is as stable in use as this position suggests. Putnam himself has more recently conceded this very point in 'Realism with a Human Face':

. . . elements of what we call 'language' or 'mind' penetrate so deeply into what we call 'reality' that the very project of representing ourselves as being 'mappers' of something language-independent is fatally compromised from the start. Like Relativism, but in a different way, Realism is an impossible attempt to view the world from Nowhere. (1990, quoted in Rorty, 1998: 43, emphasis in original)

The contingency of communication, or its multiple risk factors one might say, also makes the notion of fixity of reference – or vagueness in a semiotic sense – problematic. For Putnam, the ‘reference is fixed by the fact that that individual is causally linked to other individuals’ (Putnam, 1997: 203). Thus, ‘the referent in that person’s idiolect is also fixed, even if no knowledge that that person has fixed it’ (1997: 201). Here, too, criticisms are called for. If there is no guarantee that meanings used are identical (‘I see you but my “you” is not yours’), then there is no guarantee that reference is fixed. It is important to stress that there is temporary stabilization of social communication. However, this stability is produced above the contingent uses and references of speakers.

There have of course been recent attempts from within the realist tradition to introduce greater instability without jettisoning referential semantics. The problem remains that instability is destined to be under-explored if a realist epistemology is pursued. Thus, attempts to reconcile referential theories of reference to an external reality with polysemy achieve little in terms of a theory of complex social communication. For example, a referentialist conception of ‘semantic potential’ argues that expressions can be applied to a ‘collection of real situations’ (Recanati, 2001: 202). This criticism of Friedrich Waismann’s conception of the open texture of concepts (see Grant, 2001b: 45–6) derives from the belief that the real ‘source situations’ underlying ‘semantic potential’ act as an ‘input for the contextual construction of sense’ (Recanati, 2001: 204). True, this model can contribute to a complex theory of communication by virtue of the concepts of polysemy and semantic potential. On the other hand, it affirms the ‘reality’ of ‘real’ situations without investigating the construction of that reality.

The argument made here is that this reality is as unstable as communications. The semantic potential model reifies source situations and contexts and thus removes their instabilities. The semiotic appeal model proposed above views source situations as constructs and contexts as potential polycontexts (in the sense proposed by Luhmann, 1997). This inevitably implies a recognition of greater contingency.

A more radical paradigm shift was introduced by constructivist thinkers such as Ernst von Glasersfeld and Heinz von Foerster. It was the shift from reference to self-reference. As von Foerster said in his Declaration to the American Society for Cybernetics delivered in 1983:

The epistemological implications of the concept of self-reference gain an even greater sphere of influence in the cybernetic approach to the philosophy of science. Here, there is a direct conflict with one of the basic dogmas of traditional science: the belief that scientific descriptions and explanations should or even can bring us closer to the structure of ‘objective’ reality, to a reality which exists as such, independently of any observer. Cybernetics, with its basic concepts of self-regulation, autonomy and the informally closed character of cognitive organisms, encourages a different perspective. From this perspective, reality is an interactive concept since the observer and the observed constitute a mutually dependent pair. . . . Objectivity is the illusion

of the subject that it is possible to observe without him. The invocation of objectivity is the abnegation of responsibility, hence its popularity. (von Foerster in Schmidt, 1994: 12, my translation)

Von Foerster's statement encapsulates the implications of the fundamental shift from theories of reference to self-reference which have been developed notably by Niklas Luhmann in the social sciences and Siegfried J. Schmidt in the human sciences. If, as von Foerster and the constructivists in general suggest, objectivity is a fiction, in the sense that it is the construction of an observer and not an ontological category, then the notion of reference (to what?, to whom?) becomes problematic. The observer does not make contact with the external world, but instead processes it internally. In simplified terms, it can be said that cognition (internal processing) is an operation in which the subject processes his environment by reference to his own prior knowledge and not by approximation to the 'reality'.

If cognition is in this sense a self-referential operation as opposed to one in which reference is made to an external reality, then this means communication with others occurs, as it were, *despite* the relative closure of cognitive processes. If cognition is indeed closed, in the sense that there can be no 'contact' between one mind and another, or indeed between one mind and 'reality' *by means other than uncertain communications*, then interaction should be reconceptualized to take account of such closure. For reasons of cognitive self-reference or 'closure', therefore, communicative interaction can be more adequately viewed as a precarious process. There are several dimensions in this precariousness.

As noted above, in terms of social theory, Luhmann provides a link between social communication theory and the implications of the shift from referential models to self-referential models of systems. This is not the place to reconstruct his intricate theory of social systems (see Luhmann, 1986), but his position is well encapsulated below:

Societies are a special case of self-referential systems. They presuppose a network of communications, previous communications and further communications and also communications that happen elsewhere. Communications are possible only within a system of communication and this system cannot escape the form of recursive circularity. Its basic events, the single units of communication, are units only by reference to other units within the same system. In consequence, only the structure of this system and not its environment can specify the meaning of communications. (Luhmann, 1990: 145-6)

According to this view, communications do not establish a connection with external reality, but recursively construct communications networks. Recursivity implies redundancy and redundancy creates meaning (conventions are a classic case of the self-reference of communication codes where meaning is constructed from within, as it were). The recursivity of

communication, which Luhmann sees as being central to society, requires closure upon itself.

Cognitive autonomy does not send us sliding down a slope into social atomism (see von Glasersfeld in Schmidt, 1994) since social actors communicate by means of operative fictions of collective knowledge. The term fiction is used here since it is only ever collective knowledge as a social construction in which the cognitive autonomy of social actors is communalized:

Meaning . . . is a completely open structure, excluding nothing, not even the negation of meanings. As systems of meaning-based communication societies are closed and open systems. They gain their openness by closure. (Luhmann, 1990: 146–7)

From within the critical realist paradigm, in terms of a social theory of universal pragmatics, Habermas appeals for a revised concept of reference without abandoning realist foundations. Accepting that there is no representational correspondence between language and facts, he argues for a new concept of reference which will be able to explain how it is that speakers can refer to the same object (Habermas, 1999: 18). In realist terms, the ‘objective world’ is still held to be the backdrop for our assertions or ‘a system for possible references’ in which reference can be made to the same object: ‘The presence of possible alternatives expresses the realist intuition that we refer provisionally to an extension of the concept which is assumed to be independent of language’ (1999: 37, my translations).

Whether or not Habermas is able to reconcile his realism with his own semi-constructivist admission that we make assumptions about reality is open to some sceptical questioning. Although it is unproblematic to say that ideal truth assertions are contingent on language, this relates to only one aspect of the double contingency of communication. The other aspect of contingency is that there is no guarantee that our references transcend language in establishing a reference to a ‘reality’ outside our own reality constructions; and, if they do, it is only by means of imputations (von Glasersfeld, 1996) of other possible worlds. These imputations are also constructions, and, therefore, contingent. In other words, the notion of reference does not imply the fixity of an object in the sense proposed by Putnam, but instead assumptions about temporary social stabilization of ‘objects’.

### **Excursus: From Vague Logic to Vague Semiotics**

Communication is also contingent, since there is no unmediated reference to what might be termed external reality. Any linguistic reference to a reality construction, therefore, can be said to be vague. If the concept of reference is to be made more contingent by means of the concept of porosity, then notions of objective reference and correspondence must be revised or abandoned.



One logical concept which introduces greater contingency into the analysis of reference is vagueness: 'higher-order vagueness corresponds to contingency in which worlds are possible' (Williamson, 1999: 128). The concept of higher-order vagueness may introduce an element of contingency into questions of reference for vagueness is not a description of some imperfections of an originally precise language. Vagueness is closely related to the lack of determination of language which is cognitively and communicatively determined (by a similar lack of determination) and as such can be made operational in social communication theory at an appropriately abstract level as porosity, that is to say, the complex of unstable relationships between the agents, structures and environments of communication.

Williamson notes that in the history of logic, the concept of vagueness has tended to be viewed as a lack of precision and theories were developed in the quest for the ideal of precision as a kind of corrective of vagueness. It was with Max Black that the concept became rehabilitated as 'the existence of objects concerning which it is intrinsically impossible to say either that the symbol in question does, or does not, apply' (Black in Williamson, 1998: 73).

Williamson advocates an 'epistemic' view of the notion of vagueness. Here, he mounts no challenge to the principle that statements must be either true or false, known as the principle of bivalence: 'In cases of unclarity, statements remain true or false, but speakers of the language have no way of knowing which' (Williamson, 1998: 3). Similarly, he does not see vagueness as a defect of some precise language. Rather, vagueness is occasioned by our conceptual limitations in what could be termed a complex environment: 'The cause of our ignorance is conceptual; its object is the world' (1998: 269). Thus, the vagueness of language is brought about by our lack of knowledge about the world. In such circumstances, statements cannot be precise.

In his defence of the epistemic view, that is to say that our lack of knowledge induces vague statements, Williamson can still argue that 'full understanding' is possible and that 'to know what a word means is to be completely inducted into a practice that does in fact determine a complete intension' (1998: 276). On this view, understanding is conceptualized in pragmatic terms and not in terms of an approximation to an objective world. Even full induction into a (communication) practice fails to guarantee knowledge of what a word means, however. Meaning is stabilized in a potentially static way at variance with the uncertainty of social communication processes. If signs are seen as vague, this does indeed imply that there is always potentially extension to a wider field, even allowing for the constraints noted above. Additionally, however, semiotic vagueness is not merely a question of extended contexts or points of reference. Rather, it is the understanding that the operation of referring itself cannot determine stable reference – either to one or to many sets.

In a parallel mathematical model, Paris offers a reductionistic view of the higher principles of uncertain reasoning: 'And where to find such

principles? Well, we would claim, that some such “principles” already have a name. They are called *common sense*’ (1998/9: 78, emphasis in original). Common sense, like its relatives consensus, interaction and dialogue, is invoked where there is fear of contingency. However, the oft-used concept of common sense is aporetic and does nothing to resolve the problem of the precariousness of social interaction processes (cf. also Grant, forthcoming).

The vagueness concept is not used here in the semantic sense of bivalence, that is, making assertions about statements for which it is impossible to say whether they are true or false. Rather, it is used in a semiotic sense, that is, to refer to the fractured relationship between language and what are taken to be its referents. This semiotically enriched concept of vagueness considers signs not in their relationship to reality (since cognitive closure means that this relationship is not based on contact), but in their vagueness for the self and other speakers – as ‘fuzzy signs for someone’ (Grant, 2001b).<sup>7</sup> Both the non-realist concept of vagueness and the concept of entropy are considered in these pragmatic-semiotic terms.

At this stage, the following conclusions can be reached: (1) vagueness in semiotic terms is multivalent (i.e. in relation to the multiple environments and contingencies of social construction of the actor); (2) in cognitive terms, non-solipsistic vague semiotics is the price of autonomy and that also means information; (3) in social communication terms, semiotic vagueness, cognitive solipsism and communicative porosity are overcome by the construction of operational or functional fictions, that is, fictions that are a constituent part of our social ‘reality’.

### **Rules, Norms and Social Fictions**

In *Philosophical Grammar* Wittgenstein defines grammar as a series of agreements in which meaning is constituted through relations and not effects. A language rule, therefore, is not constructed according to an external telos, but follows the relational connections of the speakers (Wittgenstein, 1991: 94, my translation). Social actors are autonomous and yet society also requires stability in order to function as a system and thus imposes constraints and seeks to keep uncertainties to a minimum (see the contrasting accounts of Foucault, 1971; Luhmann, 1979; Mead, 1967).

There is no pre-ontological or rational need for a given syntax – it reflects functional needs for complexity and risk reduction and varies through time. Miscommunication, misreadings, misinterpretation and a series of other instances of ‘unsuccessful’ communication are evidence of the porous quality of rules. If language users can subvert rules, they can produce uncertain communication. To recapitulate: there is an interrelated progression from autonomy in cognition to a semiotic concept of vagueness to uncertainty in communication and functional fictions of society (Grant, 2000b).

Since signs are cultural constructs they are context-dependent. Since they are pragmatically constructed by users of those signs, they cannot be fixed to morpho-syntax. Here, then, in pragmatic communication contexts,

signs are contingent; relations between signs and realities are re-negotiated among users. However, it is certainly not the case that rules in themselves lay down the meaning of our signs. It is not rules that determine what is often referred to as meaning, but the users of such rules in pragmatic contexts. Or, as von Glasersfeld argues: 'The subjective element remains unavoidable because the semantic link which connects acoustic images with meanings must be actively constructed by each individual speaker' (1996: 219). And since these rules have not come about *ex nihilo*, we can add that the users of rules are not mere users or consumers, but rule-constructors. According to Fischer: 'Rules lay down the meaning of our signs, our language. Rule-following is a practice and for this reason rules can only be grounded in a feedforward-loop, i.e. pragmatically . . .' (1999: 45, my translation).

Few social communication theorists have been as ambitious in their attempt to renew a transcendental account in terms of communicative action as Jürgen Habermas. On many occasions, since the publication of his seminal *Theory of Communicative Action*, he has addressed questions of contingency, the counterfactual and even – albeit non-systematically – the concept of entropy. However, despite the range of his programme of universal pragmatics, his treatment of the precariousness of social communication tends to stop short of the more radical questions raised here:

To be sure, the rational motivation based on each person's ability to say no has the advantage of stabilizing behavioral expectations non-coercively. But the risks of dissension, which are continually fuelled by disappointing experiences and surprising *contingencies*, are high. If communicative action were not embedded in lifeworld contexts that provide the backing of a massive background consensus, such risks would make the use of language oriented to mutual understanding an unlikely route to social integration. . . . The constant upset of disappointment and contradiction, contingency and critique in everyday life crashes against a sprawling, deeply set, and unshakable rock of background assumptions, loyalties and skills. (Habermas, 1996: 21–2, my emphasis)

Habermas attributes to rational lifeworld communicative practices the capacity for communicative renovation 'in a communication threatened by entropy' (1995b: 552, my translation and emphasis). In other words, entropy is seen here as the antinomy of rational inclusive communication and as something which can be avoided. However, since entropy, as a factor of uncertainty, is a characteristic of any complex communication system such as the social communication system with its multiple contingencies, any control must take place at the cost of a reduction of the very freedom that entropy as the generation of new information underlines.

Habermas's overarching social-theoretical aim is a formal pragmatics of social integration via rational communicative contestation of transparent validity claims (see Habermas, 1992, vol.1: 12–14). This aim, while valid, is achieved by neglecting the fact that it is the uncertainty (or 'shuffledness' – Shannon and Weaver, 1964) of communication that is the communicational

counterpart to cognitive autonomy. Of course, one danger lies in taking entropy in social communication terms as an absolute and thereby failing to carry out the second step which relocates the examination of contingency or fictionality in terms of its social functioning. If entropy, as a correlate of cognitive autonomy is inherent in communication, how can this entropy be reduced or stabilized as functional communication without denying freedom or pathologizing allegedly abnormal discourses as parasitic? If communication is indeed so precarious and fictions are all we have, how does society hold together (cf. also Grant, 2001b: 55)?

Habermas himself has argued that the phenomenological lifeworld concept adopted by Luckmann, is aporetic. In other words, common knowledge is simply affirmed without due regard for the communicative practices that bring it about. As Habermas sees it, this aporia can be avoided by replacing the phenomenological method with a communication-theoretical method, since phenomenology cannot apprehend the regenerative energies of the lifeworld released by communication. The lifeworld is thus reconceptualized on a communicative-theoretical basis as a counterfactual ideal:

The one-sidedness of the culturalistic concept of the lifeworld becomes clear when we consider that communicative action is not only a process of reaching understanding; in coming to an understanding about something in the world, actors are at the same time taking part in interactions through which they develop, confirm and renew their memberships in social groups and their own identities. Communicative actions are not only processes of interpretation in which cultural knowledge is 'tested against the world'; they are at the same time processes of social integration and socialization. (Habermas, 1992, vol. 2: 139)

Even where communicative or discourse-theoretical approaches are adopted, the result of the amalgamation of Husserlian intersubjectivity, Mead's 'other-directedness' and Schutz and Luckmann's 'stock of common knowledge' is a modelling of communicative interaction in which the taking of another's perspective is reified and actors become 'entangled' in the perspective of the other. This entanglement is at variance with the modified constructivist approach set out above and induces positions which do not move far beyond intuitive transcendentalism – or the belief 'that in everyday life the environment I perceive and grasp is perceived and grasped similarly by fellow-beings endowed with a consciousness "essentially similar to my own"' (Graumann, 1995: 15).

As a consequence, mutuality is modelled as probabilistic despite a certain willingness to see interaction or mutuality as fraught with risk (Graumann, 1995: 17). However, the probabilism thesis is problematic since the features of instability and uncertainty outlined above – cognitive autonomy, vague semiotics and the unstable or polycontextual character of communication – render a dialogically modelled interaction model based on reciprocity impossible. A more plausible model in the communication and

cognition terms developed above is provided by Albrecht Wellmer's fallibilism<sup>8</sup> thesis, albeit in a discussion of truth and consensus. If communication is a fundamentally unstable process, then interactions take place in a world of communication contingencies with implications for social stability:

We cannot ever rule out the emergence of new experiences, new arguments and new reasons which could require us to question or abandon truth claims held to be secure: a context-transcending concept of truth cannot therefore be founded in the terms of a theory of consensus, but instead only in fallibilistic terms. (Wellmer, 1992: 23–4, my translation)

Habermas argues that social actors are able to overcome the contingency or locality of their experiences by raising counterfactual validity claims (1999: 26). Whereas it is certainly true that society reduces contingency in order to operate, a dualism is implied in the counterfactual concept (as an alternative to factuality). The frontier between the factual and what Habermas terms the counterfactual must be blurred since both are observer-dependent; and if it is blurred, then we have no notion of the counterfactual and instead only different levels of construction (see also Wellmer, 1992: 30). This is the essential difference between realist concepts of counterfactual ideals and constructivist concepts of fictional constructions.

The concept of an ideal communication community, the normative concept of consensus and its political counterpart – discursive democracy – rely heavily on counterfactual ideals that can be intuitively invoked in order to challenge the self-referential logic of systems, abuse of power and ‘violations’ of language games we witness every day. Whether the counterfactual ideal is sufficient to repair the reality deficit in such an idealized theory is open to serious doubt. It is more plausibly replaced by the concept of operational or functional fictions (see Grant, 2000b; Schmidt, 1994), which remain sensitive to social and subjective construction and heighten theoretical awareness of the porosity of communications and precariousness (or freedom) of social order:

... the social order, including all its symbols and meanings, exists not only precariously but has no existence at all independent of the members' accounting and describing practices. (Dreitzel, 1970: xv, cited in Meltzer et al., 1975: 79)

The approach proposed here opens the door to analyses of strategies used in the negotiation of evidently fictional relations. However, the creation of the functional fiction of a general understanding necessary to society implies the construction of multiple agreements. For Schmidt (1994: 34) the delicate question is how can subjects, despite cognitive self-reference, orient themselves in complex environments? Why, when the fictions are so evident, do speakers sustain them?

## Conclusions

Some would argue that to see language and cognition as contingent and coupled only by fictions is to open a door beyond which descends a slippery slope of relativism and social atomism. And yet the concepts of cognitive autonomy, fictionality, vague reference and communicative instability can be reconciled with social stability without recourse to dialogism, intersubjectivity and transcendental consensus. Any attempt to model communication as resolved or stable in pragmatic, cognitive or epistemological terms is destined (1) to deny contingency and (2) neglect instabilities and their precarious negotiation in communicative interaction. To destabilize communication theory is to extend analysis to the varied factors of contingency in communication. And contingency is not a synonym for alienation. There is arguably a paradoxical community of contingency in the sense that all actors are equally susceptible to risk at a system level and thus contingency at a cognitive level; as Habermas himself has said, contingency is a very important component of our shared experiences (1998: 77).

To recognize instability in communication is not a recipe for relativism or anarchy. It is a conceptualization of a new form of normativity in which operative or functional fictions unmask the way in which norms actually undergo construction. Where normativity is seen as a rational predisposition or linguistically mediated transcendental lifeworld, its construction is already partially resolved. Where constructibility is emphasized, resolution is observed as a process. Existing interactionist paradigms, referential semantics, bivalent vagueness theories or universal pragmatics cannot adequately demonstrate the contingency of such constructions. Instead, if contingency is to be taken seriously in theoretical terms, there is a real need for a theory of uncertainty in communication rooted in a plausible account of vague reference, cognitive self-reference, the porous forms of communication and the ongoing discursive renewal without which society cannot operate.

## Notes

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1. In psychological terms, Lacan refers to the 'vicissitudes of the subject' and the 'precarious life of the subject' (Lacan, 1973: 26, 85). Cf. also Cixous' work on the 'subject at risk' (in Cixous and Calle-Gruber, 1997: 172).
2. In many writings in the human and social sciences there are references to reciprocity (Malinowski), the 'I-Thou relation' (Buber), an intersubjectivity of common sense (Schutz) or the 'dialogistic character' of interpersonal rituals (Goffmann). Husserl's concept of transcendental intersubjectivity casts a long, albeit often unnoticed, shadow over much social interaction thinking.

3. There is compatibility with Parsons's and Luhmann's systems theory if symbolically generated media are also seen as being fictionally generated.
4. I have argued elsewhere that dialogism and dialogicity are not synonymous (see Grant, 1997). Whereas dialogicity implies reciprocity, Bakhtinian dialogism suggests a multiplicity of voices ('uninterrupted processes of decentralization and disunification', Bakhtin, 1984: 272).
5. See Vaihinger (1924). Some of the early interactionists also map out questions of potentially radical implications. W.I. Thomas refers to the 'as if' behaviour of social actors in an attempt to define the future reference of conduct. The potential virtuality of social behaviours thus comes to the fore. In other words, 'facts do not have a uniform existence apart from the persons who observe and interpret them' (Volkart cited in Meltzer et al., 1975: 27).
6. As pointed out by Krohn et al. (1994) in their discussion of the general applicability of concepts of self-organization in the social sciences.
7. Wittgenstein notes that sign systems always appeal to a 'live being' (1991: 192).
8. Fallibilism:

... the doctrine relative to some significant class of beliefs or propositions, that they are inherently uncertain and possibly mistaken. The most extreme form of the doctrine attributes uncertainty to every belief; more restricted forms attribute it to all empirical beliefs, to beliefs concerning the past, the future, other minds, or the external world. (Audi, 1995: 261)

### References

- Audi, Robert (ed.) (1995) *The Cambridge Dictionary of Philosophy*. Cambridge: Cambridge University Press.
- Baecker, Dirk (1999a) *Organisation als System*. Frankfurt/Main: Suhrkamp.
- Baecker, Dirk (1999b) 'Kommunikation im Medium der Information', in R. Maresch and N. Werber (eds) *Kommunikation Medien Macht*. Frankfurt/Main: Suhrkamp.
- Bakhtin, Mikhail M. (1984) *The Dialogic Imagination: Four Essays*, ed. and trans. Michael Holquist. Austin: University of Texas Press.
- Bear, J. and Y. Bachmat (1984) 'Transport Phenomena in Porous Media – Basic Equations', pp. 3–61 in J. Bear and M. Yavuz Corapcioglu (eds) *Fundamentals of Transport Phenomena in Porous Media*. Dordrecht/Boston, MA/Lancaster: Martinus Nijhoff.
- Bühler, Karl (1990) *Theory of Language: The Representational Function of Language*. Amsterdam/Philadelphia, PA: John Benjamins.
- Cixous, Hélène and M. Calle-Gruber (1997) *Rootprints, Memory and Life Writing*. London: Routledge.
- Derrida, Jacques (2000) *Ltd Inc*. Evanston, IL: Northwestern University Press.
- Fischer, H.R. (1999) 'Rationalität, Logik und Wirklichkeit: Zu einem konstruktivistischen Verständnis der Logik', pp. 35–53 in G. Rusch (ed.) *Wissen und Wirklichkeit. Beiträge zum Konstruktivismus. Eine Hommage an Ernst von Glasersfeld*. Heidelberg: Carl Auer Systeme.
- Foucault, Michel (1971) *L'Ordre du discours*. Paris: Gallimard.

- Grant, Colin B. (1997) 'Kritik der Dialogizität: Jenseits der Asymmetrien literarischer Kommunikation', *Lumis-Schriften* 49.
- Grant, Colin B. (2000a) 'Discursive Democracy as the Political Taming of Globalisation? On Recent Political Essays by Jürgen Habermas', *Debatte* 8(2): 133–48.
- Grant, Colin B. (2000b) *Functions and Fictions of Communication*. Oxford/Bern/Berlin/Bruxelles/Frankfurt/Main/New York/Wien: Peter Lang.
- Grant, Colin B. (2001a) 'Theories of Intersubjectivity: Heuristic Fiction or Counterfactual Ideal?', pp. 85–101 in H. Briel and A. Kramer (eds) *In Practice: Adorno, Critical Theory and Cultural Studies* (German Linguistic and Cultural Studies, 9). Oxford/Bern/Berlin/Bruxelles/Frankfurt/Main/New York/Wien: Peter Lang.
- Grant, Colin B. (2001b) 'Vagueness, Porous Communication, Fictions of Society', pp. 43–58 in C.B. Grant and D. McLaughlin (eds) *Language–Meaning–Social Construction: Interdisciplinary Studies*. Amsterdam/New York: Rodopi.
- Grant, Colin B. (2001c) 'Introduction', in Colin B. Grant and D. McLaughlin (eds) *Language–Meaning–Social Construction: Interdisciplinary Studies*. Amsterdam/New York: Rodopi.
- Grant, Colin B. (ed.) (forthcoming) *Rethinking Communicative Interaction: New Interdisciplinary Horizons*. Amsterdam/Philadelphia, PA: John Benjamins.
- Grant, Colin B. and D. McLaughlin (eds) (2001) *Language–Meaning–Social Construction: Interdisciplinary Studies*. Amsterdam/New York: Rodopi.
- Graumann, Carl F. (1995) 'Commonality, Mutuality, Reciprocity: A Conceptual Introduction', pp. 1–24 in I. Marková, C.F. Graumann and K. Foppa (eds) *Mutualities in Dialogue*. Cambridge/New York/Melbourne: Cambridge University Press.
- Habermas, Jürgen (1992) *The Theory of Communicative Action*, 2 vols. Cambridge: Polity Press.
- Habermas, Jürgen (1995a) *Vorstudien und Ergänzungen zur Theorie des kommunikativen Handelns*. Frankfurt/Main: Suhrkamp.
- Habermas, Jürgen (1995b) 'Replik', *Revue Internationale de Philosophie* 4: 551–63.
- Habermas, Jürgen (1996) *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*, trans. William Rehg. Cambridge, MA: MIT Press.
- Habermas, Jürgen (1998) *Die postnationale Konstellation: Politische Essays*. Frankfurt/Main: Suhrkamp.
- Habermas, Jürgen (1999) *Wahrheit und Rechtfertigung: Philosophische Aufsätze*. Frankfurt/Main: Suhrkamp.
- Husserl, Edmund (1997) *The Crisis of the European Sciences and Transcendental Phenomenology*, trans. D. Carr. Evanston, IL: Northwestern University Press.
- Jumarie, Guy (1990) *Relative Information: Theories and Applications*. Berlin: Springer.
- Krohn, W., G. Küppers and R. Paslack (1994) 'Selbstorganisation – Zur Genese und Entwicklung einer wissenschaftlichen Revolution', pp. 441–65 in S.J. Schmidt (ed.) *Der Diskurs des Radikalen Konstruktivismus*. Frankfurt/Main: Suhrkamp.
- Lacan, Jacques (1973) *The Language of the Self: The Function of Language in Psychoanalysis*. Baltimore, MD/London: Johns Hopkins University Press.
- Lacan, Jacques (1975) *Le Séminaire XX – Encore*. Paris: Seuil.



Leydesdorff, Loet (2001) *A Sociological Theory of Communication: The Self-organization of the Knowledge-based Society*. USA: Universal Publishers/uPUBLISH.com.

Linell, Per (1995) 'Troubles with Mutualities: Towards a Dialogical Theory of Misunderstanding and Miscommunication', pp. 176–213 in I. Marková, C.F. Graumann and K. Foppa (eds) *Mutualities in Dialogue*. Cambridge/New York/Melbourne: Cambridge University Press.

Linell, Per and Thomas Luckmann (1991) 'Asymmetries in Dialogue: Some Conceptual Preliminaries', in I. Marková and K. Foppa (eds) *Asymmetries in Dialogue*. Hemel Hempstead: Harvester Wheatsheaf.

Luckmann, Thomas (1977) *Lebensweltliche Zeitkategorien, Zeitstrukturen des Alltags und der Ort des historischen Bewußtseins*. Stuttgart: Reclam.

Luhmann, Niklas (1979) *Trust and Power: Two Works by Niklas Luhmann*. Chichester: Wiley.

Luhmann, Niklas (1986) *Soziale Systeme: Grundriß einer allgemeinen Theorie*. Frankfurt/Main: Suhrkamp.

Luhmann, Niklas (1990) *Essays on Self-reference*. New York/Oxford: Columbia University Press.

Luhmann, Niklas (1993) *Gesellschaftsstruktur und Semantik*, vol. 1. Frankfurt/Main: Suhrkamp.

Luhmann, Niklas (1997) *Die Gesellschaft der Gesellschaft*, 2 vols. Frankfurt/Main: Suhrkamp.

Mead, George H. (1967) *Mind, Self, and Society from the Standpoint of a Social Behaviorist*, ed. and intro. C.W. Morris. Chicago, IL/London: University of Chicago Press.

Meltzer, B.N., J.W. Petras and L.T. Reynolds (1975) *Symbolic Interactionism: Genesis, Varieties and Criticism*. London/Boston, MA: Routledge and Kegan Paul.

Paris, Jeff (1998/9) 'Common Sense and Maximum Entropy', *Synthese* 117(1): 75–93.

Putnam, Hilary (1997) *Mind, Language and Reality. Philosophical Papers*, vol. 2. Cambridge: Cambridge University Press.

Recanati, François (2001) 'Déstabiliser le sens', *Revue Internationale de Philosophie* 2: 197–208.

Rorty, Richard (1998) *Truth and Progress: Philosophical Papers*, vol. 3. Cambridge/New York/Melbourne: Cambridge University Press.

Schmidt, Siegfried J. (1994) *Kognitive Autonomie und soziale Orientierung*. Frankfurt/Main: Suhrkamp.

Schmidt, Siegfried J. (1995) 'The Myth of Autopoiesis', *Paragrana* 4: 315–23.

Schmidt, Siegfried J. (2001) 'Media Societies: Fiction Machines', pp. 11–25 in C.B. Grant and D. McLaughlin (eds) *Language–Meaning–Social Construction: Interdisciplinary Studies*. Amsterdam/New York: Rodopi.

Shannon, Claude E. and W. Weaver (1964) *Mathematical Theory of Communication*. Urbana: University of Illinois Press.

Vaihinger, H. (1924) *The Philosophy of 'As If': A System of the Theoretical, Practical and Religious Fictions of Mankind*. London and New York: K. Paul, Trench, Trubner and Co. and Harcourt, Brace and Co.

von Glasersfeld, Ernst (1996) *Radikaler Konstruktivismus: Ideen, Ergebnisse, Probleme*. Frankfurt/Main: Suhrkamp.

Watzlawick, Paul, J. Beavin Bavelas and D.D. Jackson (1967) *Pragmatics of Human Communication: A Study of Interactional Patterns, Pathologies, and Paradoxes*. New York/London: W.W. Norton and Co.

Wellmer, Albrecht (1992) 'Konsens als Telos der sprachlichen Kommunikation?', pp. 18–30 in H.-J. Giegel (ed.) *Kommunikation und Konsens in modernen Gesellschaften*. Frankfurt/Main: Suhrkamp.

Williamson, Timothy (1998) *Vagueness*. London/New York: Routledge.

Williamson, Timothy (1999) 'On the Structure of Higher-order Vagueness', *MIND* 108(429): 127–43.

Wittgenstein, Ludwig (1991) *Philosophische Grammatik*, ed. R. Rhees. Frankfurt/Main: Suhrkamp.

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