Anne Freadman, *The Machinery of Talk: Charles Peirce and the Sign Hypothesis* (Stanford: Stanford University Press, 2004), pp. xxxviii, 310.

Reviewed by Cathy Legg.

This book, officially a contribution to the subject area of Charles Peirce's semiotics, deserves a wider readership, including philosophers. Its subject matter is what might be termed the great question of how signification is brought about (what Peirce called the 'riddle of the Sphinx', who in Emerson's poem famously asked, "Who taught thee me to name"?)), and also Peirce's answer to the question (what Peirce himself called his 'guess at the riddle', and Freadman calls his 'sign hypothesis').

Unlike many Peircean scholar-semioticians hitherto, Freadman dares to critique the master, identifying what she argues are two contradictory strands in his thought. On the one hand qua ambitious scientific naturalist he desired a univocal account of sign-hood which would dictate the formal structure of meaning in all of its manifestations (spoken and written language, gesture, pictorial and diagrammatic representation, and even naturalistic phenomena such as the spots on a butterfly's back). On the other hand, she argues, his pragmatist fidelity to observed phenomena caused him to play close attention to the contingencies of *genre* - how it partitions the 'playing field' of signs into regions where the inhabitants play language-games (such as mathematics, logic, metaphysics and phenomenology) whose rules are at least to some degree 'sui generis'. One might conclude from this that different genres can never truly speak to, understand or learn from each other. However Freadman uses philosophical pragmatism to transcend such a simple-minded scepticism, showing how nonetheless differing genres can and do 'do business together'. An exceedingly delicate exploration of the nature, possibilities and constraints of such transactions forms a large theme of this book.

Where does this tension between univocal theory and respect for particular difference leave the genre of semiotics itself? Janus-faced and essentially paradoxical, insofar as it seeks to make statements applicable to all signs in all genres (to be the 'universal genre') and at the same time to attain its own generic character. A key example here is the very foundation of Peirce's semiotics – his philosophical categories. These three concepts manage to be simultaneously the same and different in mathematics (where they appear as the numbers one, two and three), in phenomenology (where they appear as experiences of unique, irreducible qualities, experiences of brute interaction with an 'other', and experiences of generalisable properties), in logic (where they appear as monadic, dyadic and triadic relations, and also as the icon, index and symbol)...and so on.

Freadman suggests that the possibility that the new discipline he was creating might be paradoxical was ignored by Peirce himself due to his 19thC optimism regarding scientific progress and unification, but that *qua* scientist he was so intelligent, methodical and honest that he prefigured despite himself the C20th breakdown of his own ideals. ("Peirce's semiotic does not account for Peirce's talk about signs", p. xxxvii). For these reasons and others Freadman takes as an emblem for Peirce's semiotics the figure of the *tramp*, who moves from region to region, belonging to none, yet demonstrably partaking in certain transactions along the way, and leaving a "mark on fences until the next rain" (p. xv).

The book's 6 chapters are paired, each pair consisting of a chapter of intense scholarship concerning a key period of development in Peirce's sign theory, followed by a chapter which explores examples and draws out wider implications. The first pairing is entitled "Thought and Its Instruments". Ch. 1 concerns 1867-1885, beginning with Peirce's initial Kantian account of "the formal necessary conditions of representation" in "On a New List of Categories". Here the categories emerge from an analysis of representation itself, corresponding respectively to the predicate, the subject, and the 'predicating' relation between them. Freadman suggests this early account fails by relegating indexicality and iconicity to outside logic and philosophy. This she argues is representative of a dualistic metaphysics, the alternative to which is to recognize that "the object

itself is of the nature of a sign". By this is meant not some callow subjective idealism but (quite the contrary) a sound naturalistic treatment of indexicality and iconicity. She then traces how Peirce was forced by the facts to 'bring in' first the index (starting with a famous review of Royce in 1885) and then the icon – (due to considerations arising from the materiality of the sign, and from mathematics).

Chapter 2 introduces the figure of the tramp, used by Peirce himself in a review of the logical system of Schroeder, whom he critiques for purporting to answer the question of what is "the most general formula of a logical problem" without ever asking what purpose or need the answers might fulfil. Freadman suggests that such questioning needs to be done in ordinary language, not mathematical logic, and by looking at logic as a device which is *used*, rather than a transparent representation of the laws of thought, broadening the discussion to trace the problematic party walls between mathematics, logic and philosophy more generally.

The second pairing is entitled, "Things and Events". Chapter 3 covers key developments which took place in Peirce's philosophy "around 1903" where, Freadman argues, Peirce added an important new iconic element to his account of cognition (via a commitment to direct perception of thirdness). Though it might be argued that his epistemology now ultimately rests on some form of transcendental phenomenology, Freadman points out that the ultimate foundation is mathematics, understood qua techne. She also claims that in 1903 Peirce attains a "new focus on the eventhood and thinghood of signs", and a deeper attention to the contingencies of particular examples as a means to raise and solve philosophical problems. His classification of signs shifts from taxonomic disjointness to a more functional understanding, which made it possible for him to recognise that the special case of the line of identity on existential graphs is simultaneously icon, index and symbol, and to bring semiotics itself newly under the microscope as an object of knowledge in its own right.

Chapter 4, "Traveller, Stay Awhile", is an extended meditation on the *index*, through a variform series of examples. In their brute dyadic connecting function, indices are semiotic devices par excellence, she argues, as Peirce realized, though in places, "a tendency to apriorism in Peirce's reliance on the categories allows metaphysical fundamentals to take over from the design of a tool" (p. 116). She also points out how indexicality goes far beyond the brute causal interactions of the paradigmatic weathervane. Rather, what serves as an index of what is frequently highly specific to genre. For example, to understand a war monument as marking the location of a certain battle presupposes an entire genre of historical commemoration. Finally she makes the deep remark that, "indexicality is a formal condition of the very postulation of genre itself" (p. 134). For at the end of the day neither logic, metaphysics, mathematics, nor any other genre could ever be deduced from first principles. For better or worse one must enter the living traditions and be trained.

The third pairing is entitled, "My Whole Theory". Chapter 5 concerns the period 1904-1909, the final flowering in Peirce's development of his semiotic. Much of this took place in his correspondence with the eccentric amateur signenthusiast Victoria Lady Welby, which Freadman discusses at length. She is not afraid to argue that here Peirce loses touch somewhat with the examples which heretofore have been his great strength, descending into an abstract thicket of distinctions which T.L. Short has famously called "darkest semeiotica".

Chapter 6 is called 'The Ways of Semiosis". Here Freadman turns her attention to the roads down which the tramp might travel – including the famous "road of inquiry". Where does this path end? Freadman takes issue with some Peirce scholarship in arguing that it is "finite in principle" (though ideally a distinction should be made here between Peirce's treatment of individual questions, inquiry into any of which is destined to terminate in a finite time-period, and inquiry in general, which is at least potentially infinite). Furthermore, she points out the way in which inquiry is only a subset of semiosis. To this end she explores the complexities of Peirce's relationship to rhetoric, taking issue with a perceived too simplistic demonizing of the genre by Haack, and pointing out the way in which

Peirce himself used the metaphor of the barrister even in explicating inquiry (*qua* needed advocate for the full possibilities of any belief). An epilogue draws an interesting contrast between Peirce and Habermas's superficially similar accounts of 'communication', insofar as (amongst other differences) Habermas cannot swallow Peirce's rigorous, naturalistic "anonymization' of the interpretant" (p. 218) – from a human being to a further sign.

Freadman seeks "a semiotics of reference", which she fears will fall between two stools - rejected *qua* theory of reference by traditional analytic philosophy because of the semiotics, and rejected *qua* theory of semiotics by 'the Saussurean tradition' because of the serious attention paid to reference. Despite her literary background, the book is sensitive to the fact that at the end of the day Peirce's is a (naturalistic) sign-*hypothesis*, whilst also retaining the mastery of subtle nuance and the metaphorical intelligence which are her discipline's great strengths. It is not an easy read, but the deep issues Freadman raises repay work and thought of the most fundamental kind.