U.T. Place University College of North Wales, Bangor

Editorial Note by Thomas Place:

It is unclear to which publication of Natsoulas Place is reacting in this unpublished comment. Natsoulas wrote several articles about Skinner's views on consciousness with titles like Toward a model for consciousness in the light of B.F. Skinner's contribution (1978), Perhaps the most difficult problem faced by behaviorism (1983), On the radical behaviorist conception of consciousness (1986), On the radical behaviorist conception of pain experience (1988). But no one is as explicit about feelings as suggested in this comment on Natsoulas. Perhaps Place is reacting to an unpublished paper of Natsoulas. The present comment is of interest because of the conceptual analysis of the verb to feel. The date of this comment is unclear. I have chosen 1988, but this is more or less an educated guess.

Natsoulas' critique of Skinner's account of feeling is a mixture of valid criticism, profound misunderstanding of Skinner's position and conceptual confusion.

Valid criticism of Skinner's account

There are two points which he makes against Skinner which seem to me entirely valid. The first is his criticism of Skinner's epiphenomenalism, his (Skinner's) denial that feelings have a causal role in the control of behaviour. He points out quite rightly that Skinner must concede a causal role to feelings with respect to verbal reports of feelings, since a first-hand verbal report of an event cannot be a first-hand report, if it is not caused by (under the stimulus control of) the event it purports to report. He is also, in my view, entirely right to insist that there is a sense of the verb "to feel" (he does not distinguish the different senses) in which a stimulus cannot have an aversive or reinforcing effect unless it is felt. In my view, he is also right to criticise Skinner's attempt to extensionalise the notion of reference by identifying reference with the control exercised by a stimulus over the verbal behaviour of the speaker, though his own account of reference is obscure to the point of obscurantism.

Misunderstandings by Skinner's position

Despite Skinner's repeated insistence that he not only does not deny the existence of feelings but, unlike the methodological behaviourist, does not deny the possibility of investigating them scientifically, Natsoulas repeatedly insists that Skinner is denying both the existence and the accessibility to science of "what the layman calls 'feelings'". What Natsoulas is claiming here is that Skinner's protestations are empty because what he (Skinner) calls feelings are not what he (Natsoulas) and the layman call feelings. To some extent this is a dispute between Skinner and Natsoulas about the meaning of the layman's term "feeling". But it also represents a misunderstanding both of behaviourism in general and radical behaviourism in particular. Natsoulas makes the common mistake of treating behaviourism as an ontological thesis, a thesis about what kind of entity and event exist or occur in the universe, when in

fact behaviourism is and always has been an epistemological and methodological thesis. The contention is that the only kind of observation sentence which can provide the necessary evidential foundation for an empirical science is an objective description of a state of affairs in its common public environment, which is or would be accepted as correct description by any number of competent observers. It follows from this that the verbal reports of human subjects on their private experiences and feelings are not the kind of observation sentences that can provide the necessary evidential foundation for an empirical science and that a genuine empirical science of psychology cannot be constructed on this basis. That is the common thread running through all varieties of behaviourism considered as an approach to psychology. Behaviourists, however, differ amongst themselves in the view they take towards the possibility of a scientific study of private events. According to the methodological behaviourist, private events lie outside the scope of empirical science. According to the radical behaviourist, private events are accessible to scientific study, but only indirectly through the study of objectively recorded verbal reports of their occurrence emitted by the person involved.

Another and more forgiveable misunderstanding relates to the evident conflict within Skinner's account between saying that private events, in so far as they do not consist in muscular movements, are events in the brain and his insistence that the study of brain events is matter for the physiologist rather than for the behaviour analyst.

Taken together, these two principles lead to the conclusion that in so far as private events are non-muscular, they fall within the province of the physiologist rather than that of the behaviour analyst, a conclusion that is in direct conflict with his claim that private events can and should be studied by the behaviour analyst. Skinner himself offers us no clear way out of this conflict. However, part of the answer must surely lie in the distinction between those neural events, if that is what they are, which figure in the verbal reports of human subjects, which frequently consist in self-directed verbal utterances on the part of the thinker/agent and which are specified as the behaviour on the part of the listener in mands like

Would you please pay attention to what I am saying, Think about it and let me know, or Imagine what it would be like if it happened here, Don't be afraid, etc.,

and those whose existence or occurrence is established either by electrophysiological recording of brain activity or by inference from theoretical assumptions required to account for the molar principles of behaviour in molecular terms. It may turn out, of course, that some of the neural events identified electro-physiologically and theoretically will be found to be the same events as those referred to by some of the linguistic expressions in ordinary language. Nevertheless, the separation of the two fields of enquiry can still be justified on the grounds that the neural events which are referred to in the linguistic expressions of ordinary language are identified in terms of their causal relation to and within the molar behaviour of the organism, whereas those identified physiologically are identified either in terms of their anatomical location or in terms of their functional connection to other functionally defined units within the system.

Conceptual confusions

There are two conceptual confusions in Natsoulas' article, one which he shares with Skinner and one which Skinner is careful to avoid. The one which Skinner avoids is the trap of using the verb to feel in its nominalised form either in the form of the abstract noun Feeling or in the form of particular feelings which human beings "have", "undergo" or "experience". Whereas if we look at ordinary language rather than philosophical talk loosely based upon it, we find that nearly all the expressions in which the concept of feeling occurs, when, to use a Rylean phrase, it is "on duty" rather than being talked about by philosophers and psychologists, are forms of the verb to feel. We do occasionally talk about hurting someone's feelings or the strange feeling which one had when so-and-so occurred, but such locutions are much less common than those in which a person is said to feel this or that. Failure to appreciate this point is the basis of the notion that feelings are the constituent sub-unit units of a private theatre known as "the stream of consciousness". This metaphor has perhaps more going for it as a phenomenological description of private experience than its counterparts in contemporary cognitive theory, the memory store full of memories and the lexicon full of word meanings; but presented, as it is here, as alternative to Skinner's description of feelings as a form of behaviour (which is of course supported by the predominant use in ordinary language of the active verb to feel) it belongs with that long line of bogus mental faculties generated by the process of nominalising verbs and adjectives which have plagued psychological thinking since the time of Plato and which came disastrously unstuck in the work of the 19th century Phrenologists.

The other conceptual confusion which Natsoulas shares with Skinner is the assumption that the verb to feel and its nominalisation a feeling are univocal, the failure to recognise that these words are used in a number of different senses. In Natsoulas' case, this failure to appreciate the different senses is bound up with his use of the nominalised form of the verb. For it is only when you begin to consider the different kinds of grammatical object which the verb takes that the different senses begin to appear. In Skinner's case, it has more to do with the influence of the traditional James-Lange Theory which treats feeling in the emotional or affective sense as a matter of feeling certain bodily sensations.

If we look at the different grammatical objects that are taken by the verb to feel, we can distinguish three principal senses of the verb and a number of sub-senses. The three principal senses are (1) the somaesthetic, (2) the affective and (3) the propositional attitude. The somaesthetic sense of the verb to feel embraces two sub-senses, one in which the grammatical object or state of affairs in an organism's environment is recognised by the stimulation it produces on the surface of the skin, and another in which the grammatical object is a bodily sensation. The sense in which "feeling" is a matter of recognising something on the basis of skin stimulation is sub-divided between two further sub-senses, one in which (mainly) objects are recognised by actively touching them with the fingers and one in which (mainly) states of affairs such as the heat of the sun are passively recognised by the stimulation which they produce on the surface of the skin. The feeling of bodily sensation differs from recognition by skin stimulation in that bodily sensations only exist so long as they are felt, whereas what is recognised by skin stimulation exists independently of its being felt. In this connection it is worth pointing out that pain, which is usually taken by philosophers as the paradigm case of a bodily sensation, is not

a pure case. This is because the noun "pain", the adjective "painful" and the verb "to hurt" not only have a purely affective use, as when we talk about someone being deeply hurt by some remark made by another person, but even when they do refer to a bodily sensation, the kind that typically occurs in cases of tissue damage, the distressing emotional response that the sensation produces is an essential part of the meaning of these words. To find a bodily sensation word that is affectively neutral we need something like "feeling a throbbing or tingling sensation in some part of the body".

In the affective sense of the verb to feel, the grammatical object of the verb is either an emotional state such as being "pleased", "excited", "angry", "frightened", "ashamed", "miserable", or "relieved", or else "an impulse" to do something such as "smile", "jump for joy", "hit someone", "get the hell out of here", "bury one's head", "give up", or "relax". These examples have been chosen to illustrate the interchangeability of the emotional state and behavioural impulse locutions and thus to make the case for a behavioural dispositional theory of emotional states. The relation between emotional states and the verb to feel in the affective sense is complex. In some cases we draw a distinction between, say, "being angry", which is purely a matter of how one is disposed to behave, and "feeling angry", which is partly a matter of how one feels like behaving, but carries with it the added connotation that is missing from just "being angry", namely that one recognises how one is disposed to behave and is thus in a better position than someone who is blind with anger to control one's feelings/behaviour. The use of the nominalised plural feelings here in locutions like "controlling one's feelings" or "hurting someone's feelings" illustrates a sub-sense of the affective sense of the verb to feel in which "feeling" and "emotion" are virtually interchangeable, where feelings in the sense in which feelings are hurt do not need to be recognised by the person whose feelings are hurt, and in which both feeling and emotion are a matter of behavioural disposition.

In face of the massive linguistic evidence favouring a behavioural theory of "feeling" in the affective sense, Skinner's persistence with the view of feeling in this sense as a perceptual response to interoceptive stimulation looks like a badly missed trick on his part. Apart from the malign influence of the James-Lange Theory already remarked upon, Skinner's distrust of ascribing behavioural dispositions to the behaving organism (discussed in my contribution to the Modgil volume, Place 1987) has let him down here. As I suggested in my comments on Rachlin's target article on pain in BSS (Place, 1985), an emotional reaction is to be thought of as a respondent (here the extensive use of the passive voice in the language of emotion) the effect of which is to set up an establishing condition (Michael 1982) such that the completion of an impulsive action, such as hurting, damaging or destroying the target object in the case of anger, becomes temporarily reinforcing. As I pointed out in the third of my papers in Behaviorism on Skinner's book Verbal Behavior (Place, 1982), each emotional reaction has a characteristic type of contingency to which it is the appropriate response. Moreover, as Cannon pointed out many years ago, accompanying this mobilisation of behaviour in manner appropriate to the prevailing contingency there is also an appropriate physiological mobilisation of the autonomic nervous system which in turn gives rise to the characteristic pattern of interoceptive stimulation from which the James-Lange Theory acquires such plausibility as it possesses.

The third principal sense of the verb to feel is that in which the verb has as its grammatical object a proposition or statement in oratio obliqua or indirect reported speech. This propositional attitude sense of the verb is a device which is used to report what Geach (1957) calls the "gist or upshot" of a judgment made by the individual in question on the basis of intuition or, as Skinner would say, on the contingency-shaping of the individual's judgmental propensities by the consequences which similar judgments have had in the past, rather than on the basis of calculation.

This by no means exhausts all that could be said about the complex "family resemblance" concept which we express by means of the verb to feel; but enough has been said, I hope, to show that neither Skinner, nor Natsoulas, get anywhere near to doing justice to its full complexity.

References

- Cannon, W. B. (1929). Bodily Changes in Pain, Hunger, Fear and Rage. Appleton-Century.
- Geach, P. T. (1957) Mental Acts. Routledge and Kegan Paul.
- Michael, J. (1982). Distinguishing between discriminative and motivational functions of stimuli. Journal of the Experimental Analysis of Behavior, 37(1), 149-155.
- Place, U. T. (1982). <u>Skinner's Verbal Behavior III how to improve Parts</u> I and II. Behaviorism, 10, 117-136.
- Place, U. T. (1985). Semicovert behavior and the concept of pain: a comment on H. Rachlin 'Pain and behavior'. The Behavioral and Brain Sciences, 8, 70-71.
- Place, U. T. (1987). <u>Skinner re-skinned</u>. In S. Modgil, & C. Modgil (Eds.), B. F. Skinner, Consensus and Controversy (Part XI, Skinner and the 'Virtus dormitiva' argument, pp. 235-243). Falmer Press.