The Character and Future of Rich Poetic Effects

John Constable

The Character and Future
of Rich Poetic Effects

JOHN CONSTABLE

Abstract
The description of multiple weak implicature offered in the theory of relevance is now sometimes held sufficient not only to explain poetic effects, common to all utterance, but also the very rich effects reported by readers of poetry. Though promising, this explanation is at present inadequate, partly because the implicative effects observed in these cases are too disorganized to be accounted for by the structured systems described in the theory, and partly because Sperber and Wilson's work, and that derived from it, does not yet address the strong but irregular connection between these effects and metrical form. This paper attempts to develop an approach to the relations between relevance and rich poetic effects by building on extensive numerical data showing that composition in isometric lines tends to depress the mean number of syllables per word. It is suggested that metre restricts linguistic choice in ways that disrupt the implicational structure of utterance but leave grammar largely intact, and it is further hypothesized that this unusual combination produces output to which readers and listeners are highly susceptible, since they can neither interpret it conclusively nor reject it as irrecoverably damaged, and so are lead to the assumption of infinite relevance. In concluding I will relate these findings and hypotheses to the status of poetry in the twentieth century.

1. Relevance, Implication, Implicature, and Poetic Effects
In the course of their discussion of communication, Sperber and Wilson offer an account of 'poetic effects' which describes them as the use of a wide range of weak implicatures to achieve most of an utterance's relevance (Sperber and Wilson 1995: 217-224). Implicatures are defined as those implications which receive some degree of authorial support, where implication is understood as the general set consisting of all the implications of an utterance:

An implicature is a contextual assumption or implication which a speaker, intending her utterance to be manifestly relevant, manifestly intended to make manifest to the hearer. (Sperber and Wilson 1995: 194)

Since implicatures come with varying degrees of manifest support, they may be seen as being arrayed along a scale of relative weakness or strength. Varieties of style, Sperber and Wilson suggest, result from the degree to which an utterer makes use of implicature, and the manner in which these implicatures are structured. A heavy use of multiple weak implicature is just one variety of such a technique, but a particularly important one.

This is a straightforward position, but not without its difficulties. There has been a tendency amongst subsequent commentators to over-sharpen the apparent distinction between implication and implicature in ways which are troublesome to employ in practice, and eventually lead to its partial rejection (Clark 1996: 172-173). The problem results from the assumption that implicature is a feature of an utterance, whereas it is better seen as a status attributed by a processing agent to selected implications of that utterance. The value of this reformulation is that it redirects attention onto the hierarchical arrangement of the implications, a feature somewhat obscured by Sperber and Wilson's focus on the admittedly very important hierarchy of implicatures. Thus, rather than describe stylistic decisions as direct manipulations of the structure of the implicature, this view would see such decisions as a manipulation of the structure of the implications, a manipulation which has probabilistic consequences on the receiver's attribution of implicature status. A speaker or writer does not build in the implicatures which a reader or listener accesses, they open up pathways through the implications, and leave guidelines for their treatment. By making some implications strong, others automatically become weak, still others are moved into intermediate positions. Thus, authors may control the strength of implications which they have themselves not accessed.

On this view, poetic effects, multiple weak implicatures in Sperber and Wilson's sense, may be recharacterized as the strategic use of the receiver's uncertainty as to whether any of a range of available implications have significant authorial sanction. In some circumstances this is not at odds with relevance, indeed it may be the principal means of achieving it. With careful direction a range of implications can be deliberately made available by the speaker or writer in order economically and equivocally to make manifest in a structured fashion large numbers of assumptions which are germane to the matter in hand. Since the status of many of these implications is not absolutely clear, there is a much room for manoeuvre should the social interaction require it, and this appears to be their basic function in day-to-day conversation. Clark (1996: 172-3) imagines a person asked whether they would like to see Tarantino's latest film replying 'I try to avoid violent films', a remark

which neither encourages further invitations of a different kind nor guarantees acceptance, though it might well be understood as doing both. In other words such uses facilitate negotiation without commitment, and withdrawal without loss of face. They also manifest the willingness to engage in such unthreatening exchanges, and this itself is of great importance.

The sensitivity of these implicative structures should be obvious. Small changes have large consequences on the hierarchies perceived, and a writer or speaker chooses between alternative hierarchies according to the communicative purpose undertaken. Choices of this kind make up a very large proportion of the compositional decisions facing an author, and most words and syntactical arrangements will be selected largely on the basis of their effects on the implicative structure, and thus on the way that a receiver rates the implications. This has led some commentators (Pilkington 1991; Pilkington 1996; Clark 1996: 174) to find Sperber and Wilson's remarks adequate to account for the deep implicative richness familiar to readers of high status literature, and particularly prominent in verse literature. However, as Culpeper (1994) has complained, it is not immediately obvious that the theory of multiple weak implicature can in fact explain this perceived open-ended richness, since its hierarchical component seems to lead inevitably to disambiguation (Culpeper 1994: 44), a point which would apply with equal force to my own sketch of implication offered above. Sperber and Wilson themselves seem to feel the need for a supplementary explanation, and appear to be looking toward some form of conventionalism:

It is tempting, in interpreting a literary text from an author one respects, to look further and further for hidden implications. Having found an interpretation consistent with the principle of relevance — an interpretation (which may itself be very rich and vague) which the writer might have thought of as adequate repayment for the reader's effort — why not go on and look for ever richer implications and reverberations? (Sperber and Wilson 1996: 278)

This move is understandable, in that the interpretative richness of canonical literature, particularly as seen in verse, is very different from the manufactured example sentences discussed by linguists. Respect for an author is doubtless significant, but whether it is sufficient to account for the strength and unanimity of the response is less certain. After all, this extremely compelling, and even overpowering, experience can be produced by passages in otherwise despised or unknown authors, and, moreover, it is not reliably produced by all the works of a much admired writer.

However much disagreement there is as to causes, the character of the phenomenon itself brings a wide variety of critics into some form of rough agreement, though the terms used to describe it, ambiguity, tension, paradox, semantic saturation, dissemination, and many others, tend to conceal the underlying similarity. Indeed, it is a commonplace of literary criticism, regardless of theoretical background, that the material we cover with the term poetry is, in many places, denser, richer, or more suggestive than other language output (Su 1994: 4-15 is a convenient survey), and range from proto-religious claims that a poem 'is a collection of words that have inexplicable significance, and give one visions and vistas' (Gurney [1916] 1991: 153), through to technical linguistic acknowledgement that poets seem to 'overcome the palling flatness and univocity of verbal messages' and to 'curb the futile and impoverishing attempts aimed at "disambiguation"' (Jakobson and Waugh 1979: 231).

There are three major difficulties for weak implicature theory in attempting to explain this response on the part of readers. Firstly, the implications derived do not follow a necessary sequence, any of a number of them could initiate the chain, different sequences facilitating slightly different interpretative accounts, as the immense range of literary critical opinion and readings relating to verse poetry will attest. Secondly, even within one reader's account elements of the interpretation are frequently found to be in various degrees dissonant with one another. Thirdly, and most troublingly, although multiple weak implication is common everywhere, these especially rich effects are strongly associated with metrical form, but very much less so with prose. This asymmetrical relationship is well-known and much discussed, but remains mysterious, and the approach to poetic effects outlined in the theory of relevance does not at present address the matter. An obvious explanation would be that metre causes these rich effects, but this leaves us with the troublesome task of explaining how they can come about in prose, which they sometimes do. Still more importantly, it must be explained why metrical language does not always cause these effects.

Solutions to these difficulties can be found by approaching verse in terms of its disablements, a an avenue already explored by Ransom ([1941] 1996), who, basing his speculations in the linguistic theories of Charles Morris, proposed that the requirements of verse introduced an element of 'indeterminate meaning' leading to a marked 'iconic' function which forced the author to shun the abstractions of scientific expression and engage instead with the refractory world in all its particularity. This, he held, established an ontological divide between the language of science and that of poetry. Though suggestive, Ransom's attempt was limited by vagueness in Morris's own theory, particularly with regard to the nature

and function of icons, a lack of precision as to the character of restriction involved, and a failure to satisfactorily account either for the appearance of rich poetic effects in prose, or for the fact that metrical restriction did not invariably lead to rich poetic effect even in the works of authors whose writings were otherwise well-known for their density.

With a different linguistic foundation, that of relevance theory, and new data regarding the character of metrical restriction, these difficulties either do not arise or can be overcome. The hypothesis outlined below will propose that the restrictions of verse sometimes, but neither inevitably nor uniquely, have the side effect of disrupting implicative structure in a way which makes it peculiarly difficult to decide to what degree an implication or set of implications receives authorial sanction, or whether it receives it all. On this view the rich poetic effects seen in verse poetry do not result from conventional assignments of value, or from intentional use of weak implicature, but from mechanically induced disruption of the implicational structure. Similar disruptions, with other causes, account for their occasional appearance in prose. This position requires the establishment of the fact that verse is restrictive in ways that could bring about these effects, and I shall now turn to this task.

2. Verse, Restriction, and Forced Choice

An attempt to strengthen the case for regarding metrical form as significantly restrictive has recently been made in an anthropological context (Constable 1997), and in the following section I shall report on the core of the argument, adding further comments on the concept of restriction and forced choice.

Metrical form is the product of restrictions governing selected surface features of a language. There is very considerable variety in the character of these restrictions, both within and between languages, but there is one abstract property common to all the world's major metrical forms, they enforce extent restrictions of two kinds:

1. Element extent restrictions, such as lines (a line in English for example is defined as a sequence of complete words totalling a fixed number of syllables, which is often a range such as 9-12 syllables).

2. Total extent restrictions, such as the formal structures found in sonnets or limericks, and usually defined as a set number of elements.

Other forms of restriction, patterning of stressed and unstressed syllables to realize a beat pattern, are of course possible, and in fact form the basis of metre in English (Attridge 1982, and 1995 provide the clearest available account of these patterning rules). To simplify the analysis

undertaken in this paper I shall concentrate on element extent restrictions in English and their effects on compositional practice.

First, we will begin with the observation that the composition of lines is a pattern-matching exercise. In other words the composer must search a mental source text for sequences of complete words which either total the required number of syllables or form suitable elements which may be accumulated to total such a number. The frequency of matching targets can be indirectly controlled by adjusting the mean number of syllables per word in the source text. That is to say given a source text of w words with a mean word length of s syllables per word, then the number of strings of complete words totalling a specified number of syllables is $\frac{w}{s}$. The lower the value for s the larger the number of target strings in the source. The mathematical foundation of this fact will be discussed in detail elsewhere (Aoyama and Constable, In Preparation). For the present purposes I will simply report that the relation is dependent on the facts that 1. the distribution of word length totals in output (i.e. the proportion of a text which is monosyllabic, disyllabic and so on) is a geometric series (previous reports that it follows an adjusted poisson distribution (Wimmer et. al. 1994, Best and Altmann 1996) are mistaken), and 2., that the sequential distribution of word length in normal output is random at the global level.

Since a greater number of target elements in the source allows the author greater choice, it is therefore to be expected that authors composing in verse will tend to depress the mean word length, and this, as a matter of course, will then be reflected in verse composed. Thus it is predicted that if a comparison is made between verse and prose composed by the same author at the same time and in the same field of discourse, the verse will possess a lower mean number of syllables per word. Test studies confirm that this prediction is in fact the case. Table 1 reports, with additions relating to work by Akenside, Wordsworth, Shelley, and George Eliot, data first published by Constable (1997). The first column lists the author name, the second the work title and form type, the third the total number of words, columns four through to nine list the proportion of the text composed of words of various lengths, and the final column gives the mean number of syllables per word (hereafter abbreviated to mspw).

It will be noted that in every case the mspw found in the prose is higher than that in the verse, polysyllables always being more frequent overall, as can be seen in Chart 1 (see p.108) which represents the data for George Eliot's Middlemarch and her poem The Spanish Gypsy. These results are significant (t = 5.9, p < 0.001), but this is not a large data set, and some caution with regard to its reliability is justified. Nevertheless,

Author	Work	Total Words	1 syll. %	2 syll. %	3 syll. %	4 syll. %	5 syll. %	6 syll. %	m s p w
John Milton	Paradise Lost (Verse)	79,836	74.32	18.47	5.58	1.42	0.2	0.01	1.35
	History of Britain (Prose)	91,471	67.01	22.58	7.99	2.1	0.29	0.02	1.46
John Bunyan	Pilgrim's Progress (Verse)	3,459	81.99	14.34	2.75	0.75	0.09	-	1.23
	Pilgrim's Progress (Prose)	52,504	79.02	16.23	3.65	0.95	0.14	0.01	1.27
John Gay	Beggar's Opera (Verse)	3,067	79.59	17.93	2.38	0.1	-	-	1.23
	Beggar's Opera (Prose)	13,231	75.11	18.61	4.78	1.26	0.2	0.03	1.33
Mark Akenside	Pleasures of Imagination	14,512	69.69	23.59	5.46	1.21	0.04	-	1.38
	Essays and Letters	20,589	65.95	19.94	9.28	3.9	0.88	0.05	1.54
P. B. Shelley	Queen Mab (Verse)	15,438	70.52	20.26	6.97	1.82	0.43	0.01	1.41
	Notes to Queen Mab (Prose)	14,744	63.24	19.17	10.79	5.24	1.33	0.22	1.63
William Wordsworth	Excursion 1814 Book V (Verse)	7,278	70.77	19.43	7.3	2.18	0.32	-	1.42
	Essay on Epitaphs 1814 (Prose)	5,425	67	18.51	8.9	4.24	1.31	0.04	1.54
George Eliot	Spanish Gypsy (Verse)	53,247	76.36	17.7	4.99	0.83	0.11	-	1.31
	Middlemarch (Prose)	317,827	70.43	19.38	7	2.5	0.57	0.06	1.44
Lewis Carroll	Hunting of the Snark (Verse)	4,396	77.3	16.95	4.5	1.11	0.09	0.5	1.3
	Hunting of the Snark (Prose)	564	72.34	17.73	6.74	2.3	0.89	-	1.42
Rudyard Kipling	Jungle Book (Verse)	2,691	80.71	16.05	2.64	0.56	0.04	-	1.23
	Jungle Book (Prose)	49,072	77.89	17.8	3.52	0.73	0.06	0.01	1.27

Table 1: Mean Word Length in Verse and Prose: Nine Authors Compared

we may provisionally work on the assumption that the hypothesis with regard to the differences between the mean word lengths of verse and prose is sound, and it may be accepted that line length specification is a real restriction with subtle but pervasive consequences on texts. Subtle, because longer words are not absolutely excluded (at the time of writing the dictionaries compiled by my own software contain approximately 71,000 word forms of which only 567 exceed five syllables, and very little verse uses lines of lengths which absolutely exclude such words). Consequently, if writers are willing to distort syntax and to tolerate

elliptical expression, or even sacrifice grammaticality, then a comparable
mean word length can easily be achieved for a particular field of
discourse. However, such penalties are usually communicatively
unacceptable, except in comic verse, and most writers prefer to reduce
their word length in order to facilitate composition. Consequently, there
is considerable restriction on the author's liberty to conjugate, combine
and derive, and as a result metrical texts contain many word forms which
are the product of forced choices (on the basis of line length alone it may
be estimated that the figure is at least five percent).

For these and a number of other related reasons, particularly that the
number of lines available to a composer at any one time is finite,
Constable (1997) has argued that conventional literary critical
assumptions that metrical form possesses features which 'enable ... it to
communicate with a richness and a precision that prose cannot achieve'
(Johnson 1990: 469) are untenable, and that the cultural universality of
metrical verse (Brown 1991: Wimsatt 1972) cannot be satisfactorily
explained in terms of its general communicative power, or by claiming
that it is an intellectual research tool which allows the writer to effectively
'mine for meanings that lie beneath the original idea of the poem'
(Adams 1997: 45). Alternative hypotheses must be compatible with the
theory and the data described above. They fall into two groups, firstly,
hypotheses of function, and, secondly, hypotheses of susceptibility.

An hypothesis of function supposes that metred language performs
some function for the composer or receiver, or both, and under this
heading may be listed mnemonic effects, the registration of verbal
intelligence, and the production of gestures of commitment which require
little effort for recognition (fuller sketches of these possibilities are given
elsewhere (Constable 1997: 189-197).

· Hypotheses of susceptibility suppose that the processing system of the
human mind is vulnerable to some types of cultural representation and
that the presence of such representations in the cultural pool is simply
supported by that system rather than serving any of its needs (see Sperber
1996 for general remarks, and Boyer 1994 for an extended discussion of
religious representations from this perspective). I have suggested
elsewhere (Constable 1997: 197-8) that the distribution of metrical verse
causing rich poetic effects might be explained in this way, and in the
following section will give more substance to this suggestion by relating
the concept of forced choice to the theory of implications and
implicature.

2.1 Forced Choice
The impact of forced choice in metre may be approached by briefly

considering a highly restrictive verbal art form that is neither common
nor prestigious. Acrostics are constructed by specifying a word, or even a
sequence of words, and then composing text within which specified
locations are letters which spell out the required word. The basic
technique is capable of many variations, and has a long history, the oldest
known examples being Babylonian texts dating back to 1000BC.
Although popular in certain social situations, notably in courtship and
other interactions involving social competition, they have never become a
vehicle for high status literary production, indeed, in English they have
been reviled as 'false wit' (Addison 1711: 256), and the reasons for this are
obvious. It is a simple matter to make an acrostic, but it is extremely
unlikely that any acrostic you make will say, or say efficiently, something
you actually want to communicate. This is a general point of very wide
application in the study of literary production, but little appreciated; it is
normal to find writers and readers assuming that because something is
improbable it is therefore hard to make. However, restriction and
difficulty are distinct concepts. Even very generous forms such as prose
compositions articulating extended chains of reasoning, or narratives, are
truly difficult in the sense that they require great organizational effort
and protracted labor. If, on the other hand, a composer accepts a
restriction, the limerick form for example, and does not struggle against
it, allowing their hand to be forced at every turn, then the production
becomes a trivial matter, and rightly called easy. Similarly, acrostics are
highly improbable, but not difficult to make. Each successive stage in the
composition is an event of relatively high probability, yet the resulting
sentence is an object of a type which would take very long periods of time
to produce accidentally.

The link between this game-form and the work of more ambitious
metrical writers is straightforward. Acrostics do *in extremis* what metre
does in a milder way and across a wider range of features. One of these
features, line length, is a restriction on word length, which is to say that it
affects the choice of words in a lexical sense, and also the freedom with
which the author can conjugate and derive words. I suggest that the
implicational structure is very delicate and likely to be disturbed by even
a slight degree of randomized diction or syntax resulting from forced
choice. These effects result in distortions which disrupt the ordered
implicative structures authors would otherwise arrange for in their
output, and thus produce unstructured implications, and, sometimes for
some readers, perhaps when a strategic level of disruption occurs, rich
poetic effects. This might be contrasted with explicative order, which,
because it is prominent, authors are much more likely to guard against
significant damage. Moreover, even when it is so damaged readers are

skilled in recovering and repairing such problems. It is therefore unsurprising that ambiguous explicature is not the mainstay of poetry, and tends to be rated rather as *jeux d'esprit* than inspiration.

It should be noted that there is no absolute reason why disruption should not cause texts to exhibit alternative structured implication, and from time to time alternative structures will indeed emerge, but this is improbable and will be a rare event. A text string has more ways of being contextually linked in a disorderly way than otherwise. Ordered chains of implication are typical only of carefully constructed communicative verbal output such as that produced every day by most individuals, and the order exhibited by such chains is derived from the complex order of a human nervous system. It is therefore highly unlikely that changes which are random with regard to human mental states will maintain or increase that order. Thus, forced choice in verse, which is a process of quasi-randomisation, does not normally result in the production of a text which exhibits alternative strong paths to guide the recovery of implicatures.

This outline proposal offers solutions to several as yet unresolved problems in poetics. On this view the characteristics traditionally associated with poetry, including metrical lines, rhythm, and rhyme in English, and sometimes seen as its constitutive features, are better regarded as powerful though neither infallible nor exclusively competent engines for the production of unstructured implication, and hence of texts likely to be perceived as possessing rich poetic effects. Thus the old conundrum as to why metre is so strongly associated with rich poetic effects and yet is neither sufficient nor necessary for their appearance (Buchler 1974: 73) evaporates. Rich poetic effect is a frequent but not invariable outcome of the employment of formal regulations which force the composer's hand. Moreover, such effects are independent of metre, and may result from other causes, hence their occasional appearance in prose.

We are thus led to a general theory, applicable to any language, of the relationship between metrical restrictions and rich poetic effects. Metrical rules force the author to choose and arrange words on grounds other than implicative linking, so weakening the implicative structure, and, probabilistically, resulting in unstructured implication which is often, though not always, seen as immensely profound and stimulating. Such a theory is capable of explaining much that has been previously perplexing. As noted above, the metrical rules of the world's languages vary greatly, as widely, in fact, as the surface phenomena available, and yet seem to produce output which is analogous in its effects. More simply, metrical rules are highly distinct, and yet poetic effect is the same everywhere, literary critics and readers the world over agreeing that words in poetry

have an 'energy of expansion that is almost explosive' (Dewey [1934] 1958: 241).

Accounting for this has been troublesome, and previous attempts to step behind the differences to a common principle, such as the structuralist view that metrical rules foreground the linguistic medium (Jakobson 1960; Mukarovsky 1970), have foundered, partly because they often adhere to the 'poetic language' fallacy at the dictional and syntactical levels, and partly for lack of an explicit causal mechanism linking the supposed distinction to psychological impressions. Constructivist or conventionalist accounts rightly disdain the use of a 'literary' category, but their own causal description is unacceptably vague in its identification of agents (the 'social') and of mechanisms. The view outlined above, where metrical rules are seen as variable generational practices for increasing the probability of achieving strategic levels of disruption in the implicative hierarchy, overcomes these difficulties, providing a causal explanation of the observed distribution of rich poetic effects in natural language and their association with formal features, without resorting to untenable multiplications of linguistic essences.

3. Human Susceptibility to Unstructured Implication

Two aspects of this approach remain to be explained. Firstly, if some degree of implicational disruption is the aim, why do authors use the roundabout route of formal restrictions, instead of heading single-mindedly for their goal? Secondly, if these texts are damaged, why do readers not reject them, instead of finding in their puzzles a peculiar degree of richness, a richness which forms the major pleasure in poetic reading and remains, for many, the principal justification of the academic study of poetry? In developing answers for both these problems, it may be as well to remind ourselves again of the character of strong, positive, responses to verse. A. C. Bradley's immensely influential Oxford lecture, 'Poetry for Poetry's Sake' was delivered not long after English literary studies were institutionalised, but it remains representative of much readerly experience both within and without the academy, including my own:

About the best poetry, and not only the best, there floats an atmosphere of infinite suggestion. The poet speaks to us of one thing, but in this one thing there seems to lurk the secret of all. He said what he meant, but his meaning seems to beckon away beyond itself, or rather to expand into something boundless which is only focused in it. (Bradley [1901] 1909: 26)

We may extract four basic observations from this description:
   1. The explicature is clear, but

2. The implications are numberless, and

3. No satisfactory interpretation is reached; however,

4. The reader feels tempted to continue interpretative effort in the expectation of infinite relevance.

With these points in mind, let us turn back briefly to structured implication. Here is a rhetorical device of great power and utility both to producer and receiver, and which it is obvious that the cognitive system is well-designed to process and interpret. Amongst other activities, this includes the function of recovering implications, weighting them according to likely importance, and forming mental representations which honour these rankings. The means by which this is achieved are clear; as Sperber and Wilson put it:

the implicatures of an utterance are recovered by reference to the speaker's manifest expectations about how her utterance should achieve optimal relevance (Sperber and Wilson 1995: 194)

Implications vary in strength, stronger ones being more likely to be recovered than weaker ones, and once recovered they guide the listener or reader in recovering yet further implications, and, most importantly, tell them when to stop. If the speaker's expectations are not obvious, then the hierarchy of implications is obscured, and communication will begin to break down or fail altogether. Human beings are very adept communicators, so this does not in fact happen very often, and when it does the receiving parties would assume either that some external noise, in the information theoretical sense, had caused damage in the utterance, or that the communicator was not acting in good faith. The advantages of such skills are so great that it is reasonable to expect the evolved mental processes to be extremely good at detecting both these difficulties. (The legitimacy of such evolutionary cognitive reasoning is discussed in Tooby and Cosmides 1992, and by the many contributors to Hirschfeld and Gelman 1994; I shall here simply assume that it is valid).

Most incoherences resulting from noise are accompanied by agrammaticality, that is to say, damage to the implicative structure of an utterance is most often found together with grammatical damage. Imagine a certain amount of noise entering an utterance: it is so much more likely that any change made randomly will result in nonsense rather than sense. If two passages are taken from a text, random numbers generated, and words at the positions specified by those numbers swapped, only a few changes are needed to render the two passages incomprehensible. There will of course be multiple possible implications in such texts, but no reader would waste their time in trying to select a mutually compatible set and arrange it in accordance with the principle

of relevance. The mind is well able to deal with utterances which are agrammatical, and can either readily infer the necessary repairs, or rapidly decide when repair is impossible and further interpretative effort worthless.

However, the same will not be true of our ability to deal with implicative disorder if unaccompanied by the agrammaticality marker, for the simple reason that problems of this kind are unlikely to have been a significant part of the evolutionary pressures shaping the modules responsible for our error correction systems. An additional possibility is that the mind is particularly vulnerable when confronted with written texts, for which it may be assumed that the human mental system is not yet well-adapted, and that readers are poor at detecting or recovering implicative problems when they are distributed evenly throughout a long text, rather than concentrated in patches as ordinary oral language problems tend to be. Therefore, when the mind attempts to process text produced according to restrictive rules which do not damage grammar, and whose affects are ubiquitous and obscure rather than acute and salient, it is neither able to reach a satisfactory interpretation, nor can it convincingly declare the text to be damaged or irrelevant. Indeed, after every unsuccessful survey of the text which finds no satisfactory interpretation and still detects no grammatical incoherence, the mind will assume still greater but as yet undiscovered relevance. Expecting, as Bradley says, 'the secret of all', we are compelled towards a 'more continuous and equal attention than the language of prose aims at, whether colloquial or written (Coleridge [1817] 1907: vol. 2, 11), and in the search for relevance 'we credit every word in poetry with the possibility of an important role. [...] And we are ready to accept a climate of mystery for the emergence of meaning and feeling' (Buchler 1974: 81).

With regard to the second type of implicative uncertainty, that resulting from the deliberate attempt to confuse, the situation is quite different. Undirected implications could, conceivably, be constructed intentionally, or, to put it another way, nonmechanically, but they are unlikely to act as powerfully on the receiver as mechanically produced effects. There are two reasons for this, both related to out undoubted ability to deal with deliberate attempts to deceive in communication. Firstly, the means of construction will leave an inferable trace, and the mind is extremely proficient at recovering such traces and finding a strong path through the welter of distracting weak links. Secondly, consistency is unlikely. The text will at one point be so ambiguous that it stimulates rejection, at another it will lapse into clarity. Mechanical means of production, however, will leave no inferable trace, because, not being organic individuals, such means have no nervous systems and no intentional states to infer.

Secondly, mechanical means will be much more consistent throughout the extent of a text, and indeed may produce pervasive low levels of unstructured implication that are extremely difficult to achieve manually.

In concluding this phase of the discussion it should be stressed that the although the emphasis here has been on questions of mental susceptibility, this is not to be taken as suggesting that hypotheses of function are of no interest here. The generation of output with these implicational peculiarities may in some situations confer status on those who compose it, and the existence of these low levels of disorder in a text makes it a particularly suitable object for competitive interpretation, and thus for the establishment of ranks within a hierarchically organized profession or other social organization. Since output of this type is unlikely to produce ready convergence of opinion, and it contrasts strongly with other output types in this respect, there is a great deal of room for the ingenious to display their talents. Of course, this function is dependent to a great extent on the respect to which the texts themselves are held in the interpretational community where the competition takes place, and this status is, I suggest, due to mental susceptibility to unstructured implication.

4. Poetic Effects: A History and a Future

As observed above, however effective verse may be as a means for producing rich poetic effects, we know from their appearance in non-metrical texts that it cannot be the only source of such effects. This has potentially important consequences for our understanding of the motivations behind avant-garde experimentation in the literary arts. We might, for example, examine numerological patterning, projects such as that carried out by those associated with the *Oulipo* group, and even word games of the Exquisite Corpse variety, as attempts to construct new engines of unstructured weak implication. Their success, or lack of it, would, on this view, be explained as a result of the character of the disruptive algorithms employed.

Free verse might be raised at this point as posing a serious problem for this approach, for here is a form which is apparently unrestricted and yet is seen by many as the 'most characteristic poetic form of the twentieth century' (Attridge, 1987: 356). The difficulties presented by this case, however, may not be as large as they seem. First of all we should bear in mind the fact that while the use of non-metrical language for poetic ends is now unsurprising it is still novel, and the depth and permanency of its penetration of the broader cultural pool is as yet uncertain. The contrast with the case of metre is sharp. For the largest part of human history metre has been strongly linked with rich poetic effect, and continues to be

so in that an absolute majority of the compositions regarded as being at the pinnacle of poetic achievement are in metred language. Moreover, there is, in spite of considerable pressure for its acceptance, still considerable disagreement, even amongst sophisticated readers, as to whether free verse is as poetically rewarding as is sometimes claimed. Recently, there has been a resurgence in resistance, as apologists will themselves admit:

In the past few years [...] I've heard many people — professors, poets, readers — speak of free verse as a failed experiment. (Fulton 1996: 57)

We need not take sides in this critical debate, which properly speaking belongs outside the universities and in the public arena, but should recognize that the connection between free-verse and rich poetic effect is not a matter of common consent, as it is with metrical verse.

The fact that free verse has any prestige at all, and that what it has is of this strangely uncertain type, remains to be accounted for. I will sketch three possibilities which could, individually or in combination, explain both the existence of positive reader response, and, on the other hand, its instability.

Firstly, from the perspective adopted in this paper the most obvious explanation is that the displayed layout of the lines, though irregular, increases processing effort, and so encourages the reader to seek for interpretations which would render such increases consonant with the principle of relevance, as for example in this representative critical reading of Geoffrey Hill's 'September Song':

As a single line, '(I have made an elegy for myself it is true)' sounds like an admission — 'I have to accept that in lamenting the death of this child I am actually selfishly preoccupied with my own mortality'. But divided on the page it becomes multilayered, since this apologetic tonal inflection is contradicted by the assertiveness of 'I have made' as a single segment, and by the strongly felt insistence on the truth of the poet's art that emerges from the division of 'it' and 'is true'. (Attridge 1987: 371)

Such lineation has the drawbacks of any manually introduced disruption, that is to say it may at one moment be transparent, at another opaque. Specifically, lineation may tend to work as a form of punctuation, and come to seem redundant and dispensable (Love 1997: 35), or the breaks may seem 'arbitrarily scattered' (Love 1997: 33), and 'wear down one's trust in a writer's abilities' (Hollander 1997: 163), and so stimulate rejection:

with sufficient ingenuity one can usually concoct a good reason for some of

the line-breaks, but aren't there better things for the reader to concentrate on? (Love 1997: 33).

Secondly, it should be noted that very little is known about the linguistic characteristics of free verse, and that it is conceivable that these might give evidence of restrictive practices. John Hollander has referred to the 'thirty-em typeset line not too egregiously varied' of much contemporary poetry (Hollander 1997: 170), which, putting aside the polemical context in which it appears, draws attention to the possibility that the restrictions of apparently free verse have been overlooked. It would in fact be surprising if most free verse writings turned out to be constructed from concealed metrical lines, and in examination of William Carlos Williams's *Paterson* I have found no evidence of the mathematical ordering characteristic of isometrically lineated text (See Aoyama and Constable (in preparation) for a discussion of this feature), but the possible importance of other techniques, particularly the deliberate distortion of stress and word-class frequencies, remains and deserves investigation.

Thirdly, questions relating to institutional and social context may be invoked. Much of the reading and writing of free verse, and of metrical verse for that matter, takes place in the academic arena or within tightly knit groups and circles (Gioia 1991). Within the universities students are encouraged to believe that they are engaged in a demanding and fruitful activity, and are rewarded, as are their instructors, for the ingenuity of their interpretations. Similar considerations, with different rewards, apply to public poetry societies. Under such pressure it is hardly surprising that readers and writers feel motivated, at least temporarily, to move past the obvious interpretation, even though it is consistent with the principle of relevance, and seek an even richer set of interconnected implications.

Even if we accept this account of experimentation, and of the place of free verse within it, the lack of success of experimental formal techniques and the insecure status of free verse may provoke us to ask why metre, which has clearly been a very effective method, is commonly perceived as a form under threat (Steele 1990), or even as a 'dying technique' (Wilson 1952). Some progress towards an understanding can be made by referring to the history and status of rich poetic effects themselves.

As is obvious, poetry, in general and irrespective of its formal causes, has declined in prestige and importance in the public world (Aviram 1994; Gioia 1991), and the institutional support of the universities, which has been very largely responsible for its maintenance in the last eighty years, is beginning to weaken:

there is an absence of poetry in many cultural places where it used to be in

evidence. University curricula in literature are increasingly uneasy about it. (Hollander 1997: 9)

The reasons for this are obscure and little investigated, and in-so-far as they are discussed it is supposed that some general change for the worse in culture and society is responsible (Aviram, 1994: 4; Gioia 1991, *passim*). I suggest that this pessimism is untenable as history, and that the characterization of rich poetic effects given above permits a more persuasive explanation. Let us review the argument.

Poetry, ancient and modern, may be seen as the use of various techniques, amongst them structural restrictions such as verse form, to increase the likelihood of producing low levels of disruption to the structure of implications in linguistic output. Successful disruptions are sufficient to cause irresolvable ambiguity in an utterance, but fall just short of stimulating rejection. Readers or listeners thus experience an interpretative illusion suggesting infinite richness. While the explicit statement of poetry often seems clear, its implications, which are numberless, are of uncertain status. With no final interpretation in view, we are led to expect nothing less than transcendent meaning, an expectation which is forever encouraged but never fulfilled.

This is far from an unpleasant process, and has affinities with religious experience. However, to those accustomed to other means of information gathering and concept generation it may come to appear fraudulent, and this is the aspect it presents to scientific thinkers such as Barrow and Newton, who found it 'ingenious nonsense' (Osborn, 1966: 350), and to the contemporary physical chemist Peter Atkins who has referred to it as a self-deluded titillation (Atkins 1995: 123). However severe and crude these judgements may appear their motivation is understandable, and to some degree it is shared by non-scientists whose interests, though far from technical, also lie in establishing an imaginative grasp of the world. Poetic techniques are effective mechanisms for the creation of interpretative illusions suggesting profundities of response and understanding which far exceed the engagement or research of the writer. I suggest that though unable to phrase their suspicions in so many words, general readers have become progressively less willing admirers of poetry, with the exception of unpretentious popular lyrics, for exactly these reasons, and have been turning to the major competitors, that is to say to fiction (Perkins 1976: 129), and more recently to non-fiction. Writers of poetry have responded with experimentation and, more significantly, by progressively loosening the restrictive rules employed in their work in an attempt to more nearly approximate to the freedoms of prose without actually foregoing the mechanically disruptive benefits of metrical composition. Even free verse,

which has been claimed as a radical departure, is now best regarded as a highly salient development in a long-term trend (Kirby-Smith 1996): 20). If, as seems possible, twentieth-century free verse has in fact relinquished formal assistance and relies on other means of creating these *trompe-l'oeil* of cognitive and emotional depth, then the uncertainty of its status and its dependence on institutional reinforcement become unsurprising. We may expect oscillation over the boundary between free and metrical verse for some years to come, but in the absence of a generational technique which is as disruptively effective as traditional verse, yet without its disadvantages, or, rather, without disadvantages which are as obvious, it seems likely that the importance of poetry as a distinct and nominated genre will continue to fade. The discovery of such alternative techniques cannot be ruled out, but the required features are numerous and very specific. It must produce disruption of a particular level, neither too much nor too little, it must apply evenly to all subject areas, the results must be consistently distributed throughout a text, and it will work best if it is not readily recognized as a restriction by composers or readers. This is a tall order, and the linguistic and psychological potential for such a new poetic may well be, simply, non-existent.

References

Adams, A. (1997) [Untitled note on free verse] *The Rialto*. 38: 45.

Addison, Joseph (1711) *The Spectator, No. 60* (9 May 1711): 253-258, in D. Bond, ed., *The Spectator*, Vol. 1 1965. Oxford: Clarendon Press.

Aoyama, H. and Constable, J. (In preparation.) 'Word Length Frequency and Distribution in English: Observation, Theory, and Implications for the Construction of Verse Lines'.

Atkins, P., (1995), 'The limitless power of science', in J. Cornwell, ed., *Nature's Imagination: The frontiers of scientific vision*, pp. 122-132. Oxford: Oxford U.P.

Attridge, D. (1982) *The Rhythms of English Poetry*. London: Longman.

Attridge, D. (1987) 'Poetry Unbound?: Observations on Free Verse', *Proceedings of the British Academy* 73: 353-374.

Attridge, D. (1995) *Poetic Rhythm: an introduction*. Cambridge: Cambridge U.P.

Aviram, A. (1994) *Telling Rhythm: Body and Meaning in Poetry*. Ann Arbor: Univ. of Michigan Press.

Best, K.-H, Altman, G. (1996) 'Project Report', *Journal of Quantitative Linguisitics* 3(1): 85-88.

Boyer, P. (1994) *The Naturalness of Religious Ideas: A cognitive theory of religion*. Berkeley: Univ. of California Press.

Brown, D. E. (1991) *Human Universals*. New York: McGraw-Hill.

Bradley, A.C. ([1901] 1909) 'Poetry for Poetry's Sake', in *Oxford Lectures on Poetry*, pp. 1-34. London: Macmillan.

Buchler, J. (1974) *The Main of Light: On the Concept of Poetry*. Oxford: Oxford U.P.

Clark, B. (1996) 'Stylistic analysis and relevance theory', *Language and Literature* 5.(3): 163-178.

Coleridge, S. T. ([1817] 1907) *Biographia Literaria*. J. Shawcross (ed). Oxford: Oxford U.P.

Constable, J. (1997) 'Verse Form: A Pilot Study in the Epidemiology of Representations', *Human Nature* 8(2): 171-203.

Culpeper, J. (1994) 'Why relevance theory does not explain "The relevance of reformulations"', *Language and Literature* 3(1): 43-48.

Dewey, J. ([1934] 1958), *Art as Experience*. New York: Capricorn Books.

Fish. S. 1980. 'How To Recognize a Poem When You See One', in *Is There a Text in this Class: The Authority of Interpretative Communities*. Cambridge Mass.: Harvard U. P.

Fulton, A. 1996, "Alice Fulton", in D. Lehman, ed., *Ecstatic Occasions, Expedient Forms*. Ann Arbor: Univ. of Michigan Press.

Gioia, D. 'Can Poetry Matter', *Atlantic Monthly*, May 1991.

Gurney, I. ([1916] 1991), *Collected Letters*. Ed. R. K. Thornton. Manchester: Carcanet.

Hirschfeld, L. A. and Gelman, S. A. (eds.), (1994) *Mapping the Mind: Domain specificity in cognition and culture*. Cambridge: Cambridge U.P.

Hollander, J. (1997), *The Work of Poetry*. New York: Columbia U.P.

Jakobson, R. (1960) 'Linguistics and Poetics', in T. A. Sebeok (ed) *Style in Language*, pp. 350-377. Boston: Technology Press of MIT.

Jakobson, R. and Waugh, L. (1979) *The Sound Shape of Language*. Bloomington: Indiana U.P.

Johnson, M. L. 'Applying the Breaks: A Review of the Poetic Line', *Language and Style*, 23(4): 469-488.

Kirby-Smith, H. T. (1996) *The Origins of Free Verse*. Ann Arbor: Univ. of Michigan Press

Mukarovsky, J. (1970) 'Standard Language and Poetic Language', in Donald C. Freeman, ed., *Linguistics and Literary Style*, pp. 40-56. New York: Holt.

Love, T. (1997), 'The End of the Line for Modern Poetry', *Acumen* 29: 30-35.

Pilkington, A. (1991) 'Poetic Effects: A relevance theory perspective', in R. D. Sell (ed) *Literary Pragmatics* pp. 44-61. London and New York: Routledge.

Pilkington, A. (1996) 'Introduction: relevance theory and literary style', *Language and Literature* 5(3): 157-162.

Ransom, J. C. ([1941] 1996) 'Wanted an Ontological Critic', in R. S. Gwynn, ed., *The Advocates of Poetry: A Reader of American Poet-Critics of the Modernist Era*, pp. 3-42. Fayetteville: Univ. of Arkansas Press.

Osborn, J., (ed) (1966) *Joseph Spence: Observations, Anecdotes, and Characters of Books and Men*. Oxford: Clarendon Press.

Perkins, D. (1976) *A History of Modern Poetry: From the 1890s to the High Modernist Mode*. Cambridge Mass.: Harvard U.P.

Sperber, D. and Wilson, D. (1995, 1st ed. 1986) *Relevance: Communication and Cognition*. Oxford: Blackwell

Sperber, D. and Wilson, D. (1996), 'On verbal irony', in J. J. Weber (ed) *The Stylistics*

Reader: From Roman Jakobson to the present., pp. 260-279. London: Arnold.

Sperber, D. (1996) *Explaining Culture: A Naturalistic Approach* Oxford: Blackwell.

Steele, T. (1990) *Missing Measures: Modern Poetry and the Revolt Against Meter.* Fayetteville: Univ. of Arkansas Press.

Su, S. P. (1994) *Lexical Ambiguity in Poetry.* London: Longman:

Tooby, J. and Cosmides, L. (1992) The Psychological Foundations of Culture, in J. Barkow, et. al. (eds) *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* , pp. 19-136. New York: Oxford U.P.

Wilson, E. (1952) 'Is Verse a Dying Technique?', in *The Triple Thinkers: Twelve Essays on Literary Subjects*, pp. 22-36. London: John Lehman.

Wimmer, G., Köhler, R., Grotjahn, R. and Altmann, G., 1994 'Towards and Theory of Word Length Distribution', *Journal of Quantitative Linguistics* 1(1): 98-106.

Wimsatt, W. K. ed. (1972), *Versification: Major Language Types.* New York: Modern Language Association, New York University Press.

Youmans, G. (1989) 'Introduction: Rhythm and Meter', in Paul Kiparsky and Gilbert Youmans (eds.), *Phonetics and Phonology Volume I: Rhythm and Meter*, pp. 1-14. San Diego: Academic Press.

Chart 1: Word Length in George Eliot's *Middlemarch* (prose) and *The Spanish Gypsy* (Verse) Compared