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compiled by Joy Murray  
with:  
Lorraine McDonald (Program Convener)  
Susan Martin  
Terri Morley-Warner  
Peter Widders

# From Babble to Scrabble: Integrating language creativity and linguistic intervention

David Crystal

When we reflect on the extraordinary things that old human beings do to spoken and written language, it becomes a real puzzle why learning to read should present young human beings with so many difficulties. You will note that I said *do to* and not *do with*. Orators and writers do remarkable things *with* their language, but that is not the subject of this paper. Rather, I am referring to our equally remarkable but widely underestimated skill to do things *to* our language—to take it, manipulate it, juggle with it, even twist it inside out, in order to make it do our will. And what a will we have! No Greek God would have thought up such bizarre and arbitrary things as we do, when we engage in what is usually called *language play*.

## Adults at linguistic play

Everyone, regardless of cognitive level, plays with language or responds to language play. The responses range from the primitive pleasure experienced by severely mentally handicapped children when they hear dramatically contrasting tones of voice (in such interactive games as 'peep-bo') to the cerebral bliss experienced by highly sophisticated connoisseurs as they explore the patterns of sound-play in, for example, James Joyce's *Finnegans Wake*. Between these extremes, there are the hundreds of books with titles such as *1000 Jokes for Kids* and, I'm afraid, *Another 1000 Jokes for Kids*, which are packed full of linguistically-based exchanges, read avidly (though with surprisingly unsmiling mien) by children—and not a few adults—all over the English-speaking world. Most of the jokes involve plays on words of all kinds, as in these examples from Katie Wales' *The Lights Out Joke Book* (1991). *Where does a vampire keep his money? In a blood bank* is a straightforward lexical pun. Most involve more than this, such as those which depend on phonological play (*What's a ghoul's favourite soup? Scream of tomato*), phonetic play (*Doctor, doctor, I've just swallowed a sheep! How do you feel? Very baaad*), graphological play (as in the book-title *Witch-hunting for Beginners* by Denise R Nockin), or a fixed grammatical construction in the question stimulus (*What do you get if you cross a sheep with a kangaroo? A woolly jumper*).

Language play involves far more than jokes, however. In an analysis of all game shows on British radio and television, two-thirds turned out to be language based. They included games in which the aim was to guess a word in a well-known phrase (*Blankety Blank*), to distinguish between real and false etymologies (*Call My Bluff*), to talk for a minute without hesitations or repetitions (*Just a Minute*), and several which built up words using randomly generated sequences of letters. Open the published broadcasting guides, and you would see such programme titles as *My Word*, *Catch Phrase*, and *Chain Letters*. Why are there so many such games? My own view is that language-based games are so popular because everyone can play them without training. Once you have learned to talk (or, for the writing-based games, to spell), you need no other special skill. It is not like *Mastermind*, where you need to acquire a highly specialized area of knowledge, or *The Krypton Factor*, where you need above-average strength and athleticism. To participate in, say, *Blankety Blank*, all you need is your linguistic intuition about what word is most likely to fill the blank in such a phrase as, say, *life and — (limb, soul, death)*. In such games we are all equal.

Media word games are only the tip of the iceberg of language games. There are hundreds of word games recorded in Gyles Brandreth's *The Joy of Lex* (1987) or Tony Augarde's *The Oxford Guide to Word Games* (1984), for example, ranging from the familiar crossword puzzle and *Scrabble* to linguistic pastimes which are bizarre in the extreme. *Scrabble*, for example, is now thought to be the most widely played game in the English-speaking world, with a formal competitive dimension, a world championship, and associated books of commentary, just like chess. But think, for a moment, about what we are doing when we play *Scrabble*. It is a game where we set ourselves a physical limit (a grid on a board), assign numerical values to letters (based on our intuitions of frequency), and then hunt out and use the most obscure (because highly scoring) words in the language. This is not rational linguistic behaviour. Words don't

normally 'score' anything. We do not listen to a sentence, then hold up score cards, as in an ice skating competition. Moreover, in *Scrabble* it is not even necessary to know what the words mean: all we need to know is that they exist. There are many publications which list all the words in English consisting of two letters, of three letters, and so on, or those which are most useful because they are highest scoring (such as *xebec*, *qaid*, and *haji*). None of them say what the words mean. If challenged, we look them up in a dictionary—and if we are playing 'professionally', in the game's official dictionary (*Chambers*). In a market survey of dictionary use a few years ago, most people said they used their dictionaries most often when they were playing *Scrabble*.

The impulse to play with words makes us behave in a truly bizarre way. What could be stranger than deliberately constructing sentences which are difficult or impossible to pronounce, as in the popular tongue twister? Perhaps deliberately constructing a written sentence which only makes use of one vowel (a *univocalic*). A Victorian wordsmith, C C Bombaugh, constructed several poems based on this principle: 'No cool monsoons blow soft on Oxford dons / Orthodox, jog-trot, bookworm Solomons . . .'. Another game is to avoid the use of a particular letter of the alphabet (a *lipogram*)—not difficult with, say, Q or Z, but very difficult with the most frequent letters, such as E or T. Ernest Wright wrote a 50,000 word novel, *Gadsby*, which made no use of letter *e*: 'Upon this basis I am going to show you how a bunch of bright young folks did find a champion; a man with boys and girls of his own . . .'. Another is to find a word or a sentence which reads the same way in both directions (a *palindrome*), as in *madam* and *Draw o coward*—the longest reputedly over 65,000 words. Or constructing anagrams which make sense: you can, if you try long enough, take the letters of *total abstainers* and make up *sit not at ale bars*; *astronomers* produces *moon-starers*. There are competitions you can enter if you want to do this kind of thing. And, as a final example, there is the *pangram*, the target being to construct a meaningful sentence containing every letter of the alphabet, with every letter appearing just once. The typist's *The quick brown fox jumped over the lazy dog* is a very poor pangram, containing 45 letters. *Veldt jynx grimps Waqf zho buck* is a 1984 prize-winner, though you need recourse to a major dictionary to determine its meaning.

The long history of word play has some strange episodes. *Gematria* is probably the strangest—a medieval mystical practice in which secret messages were thought to be hidden in the letters of words. If we use modern English, and assign numerical values from 1 to 26, in serial order, to the letters of the alphabet, *Gematria* texts will show you some remarkable correspondences—identical totals, or adjacent totals, or totals separated by 100. If you add the numerical value for *arm* to that for *bend*, you get the total for *elbow*. *King + Chair = Throne*. *Keep + Off = Grass*. More significantly, according to its practitioners, *Jesus, Messiah, cross, gospel, and son God* each totals 74. Let me show you how it works, from the present situation. Trevor Cairney your president is obviously a high-ranking numerologist. He pointed out in his introduction to the first conference programme that his term of office came to an end this month, 'so it is quite fortuitous that the conference is to be held in my home town'. Nothing fortuitous about it at all. The whole thing revolves around the 9s. Trevor has to find a committee, so what does he do? He sees that *Australian Reading Association* = 299. Trevor's first name = 98, just one short of a perfect match, but so close that his role is obviously meant to be. Now let us look at the remaining committee members, as listed: Kate Khoury? Khoury = 98. Lorraine McDonald? Lorraine = 92. Joy Murray? Murray = 96. Bill Spence? whole name = 97. Ed Truscott? Ed = 9. Jane Imer is a problem, as her name adds up to only 75, but as that is the same as the total for Cairney, she gets in. Kaye Richards is another problem, but as her first name adds up to 42, which is the answer to life, the universe, and everything (according to Douglas Adams), she cannot be ignored. But how to fit in Mary Peacock, with 54 (first name) and 57 (surname)? It would be a disaster to leave out the treasurer. All we need is careful research. The numerical value of the surnames of the whole committee is 667. The Darling Harbour Convention Centre is 344. That makes 1011. And if we add Mary + Peacock we get 111. A perfect 1000. The conference is saved. Visiting speakers will obviously do well if they can fit in with this underlying structure. Marie Clay falls just a little short, at 87. Crystal? 98. Same value as Trevor. Can't fail.

What a waste of time! Or is it? I enjoyed the hour I spent trying to make it work out, and most people find the results amusing. I don't suppose we will try and live our lives by these

numerical coincidences, as did happen in medieval times—only travelling on days whose value was felt to be auspicious, or arranging marriages on the basis of numerical identity. Some people get very serious about word games. For instance, you don't mess with crossword enthusiasts. I know a man who gets very nasty if he can't complete his *Times* crossword in an hour. And it is perhaps no coincidence that so many crossword compilers, such as Ximenes and Torquemada, chose as their pseudonym the name of a practitioner of the Spanish Inquisition. But most of us appreciate the fun involved in playing with our language, manipulating letters, searching for coincidences, looking for the unexpected links between words. It is all around us. Look on the walls of many a subway and you will find thousands of examples of linguistic ingenuity—the apparently unending set of variations on — *rules OK*, for example. Begun as a soccer fan's slogan, *Arsenal Rules OK?*, it has generated thousands of variants, and continues to do so (recent ingenious cases include *Archimedes rules - Eureka!* and *Mallet rules croquet?*).

Some professions rely greatly on verbal play. Newspaper sub-editors all over the English-speaking world devise headlines or subheadlines with great ingenuity. From the *Sydney Morning Herald*, for example: *A shedentary life* (an article on men's garden sheds), *A roo awakening* (an article on gourmet kangaroo meat). Advertising agencies make their living by it. One of the most successful sequences in advertising history, still going after 20 years, is the word-play of the Heineken lager series, which began in 1974 with *Heineken refreshes the parts other beers cannot reach*, and which later included such word substitutions as *pilots*, *parrots*, *pirates*, *poets*, and *partings*, each accompanied by a failed visual situation (such as a poet unable to compose verse) which was then turned into an immediate success after ingesting quantities of the appropriate lager (Crystal, 1995: 389).

But this is not just a professional matter. Listen to any informal conversation, especially among young people (which is most of us) and there is evidence of language play: the mock regional tone of voice adopted when someone is telling a funny story ('There was this Irishman . . .') or the twisting of each other's words to score or make a silly point, as in the repartee which followed the arrival of someone whose arm was in plaster, in which various participants said such things as *No 'arm in it, Got to hand it to you, Put my finger on it, did I?* (Chiaro, 1992: 115). Literature aside, everyday conversation is the most creative of language varieties.

Lastly, nonsense. It would be wrong to conclude this brief review of adult ludic language without some reference to the occurrence of controlled unintelligibility as a feature of language play. At least all the above examples are meaningful. But literal nonsense also exists, in a range of everyday contexts from euphemistic swearing (where a nonsense word is used to avoid a blasphemy or obscenity) to the conversational use of such memory-fillers as *thingummy* and *watchamacallit*. Language play makes use of nonsense, too, as in the case of scat singing and, at a literary level, in such creations as Lewis Carroll's 'Jabberwocky', many of the neologisms of James Joyce, or the crazy verbal concoctions of Ogden Nash. Malapropisms and spoonerisms are other famous examples. And while we are in the literary world, we should not forget the use of abnormal spelling as a source of language play, seen at its best in the oeuvres of Josh Billings and Artemus Ward, which so dominated the American social scene in the late 19th-century (Crystal, 1990; 1995: 84).

These examples are brought together to substantiate the view that verbal play is natural, spontaneous, and universal. It is practised in some shape or form by everyone, whether they are born jokers, or people who would never receive an Oscar for their sense of humour. It is not solely a matter of humour, after all, but involves notions of enjoyment, entertainment, intellectual satisfaction, and social rapport. Although patterns and preferences vary greatly, the phenomenon seems to cut across regional, social, and professional background, age, sex, ethnicity, personality, intelligence, and culture (see the review by Kirshenblatt-Gimblett, 1976; Apte, 1985). Whether the motivation which drives it is innate or learned, I do not know; but when we turn to the topic of child language acquisition, we see it there from the outset. From Scrabble, we therefore turn to babble.

### Children at linguistic play

Language play is at the core of early parent-child interaction. We see it in the deviant linguistic behaviour which characterizes much parental speech to babies—such features as higher and wider pitch range, marked lip rounding, rhythmical vocalizations, tongue clicking, mock threats,

and simple, repetitive sentence patterns (Snow, 1986). We see it in the words and rhythms of the songs parents sing—their lullabies and nursery rhymes. We see it in the early play routines parents use, in which considerable pleasure is taken by all participants in developing a dynamic language that complements the patterns of visual and tactile contact. Nuzzling and tickling routines, finger-walking, peeping sequences, bouncing games, build-and-bash games, and many other interactions are not carried on in silence: on the contrary, they are accompanied by highly marked forms of utterance (which people, incidentally, are often quite embarrassed to hear later out of context). Moreover, as Bruner and others have often pointed out (e.g. Ratner & Bruner, 1978), these interactions have a clear-cut task structure, with a limited number of semantic components, considerable repetitiveness, and high predictability, and this promotes the emergence of a 'play within the play': having established in the child, through repeated occurrences, an expectation that a game is to develop in a particular way, parents are then very ready to disrupt this expectation, in the hope that it will elicit an even stronger response. For example, a game such as 'round and round the garden', which has a rapid and highly tactile climax, is deliberately varied by introducing a pause before the climax—making the child 'wait for it', in effect—and thus eliciting extra enjoyment. Given the remarkable emphasis placed upon language play in child-directed speech during the first months of life, one would expect it to be a central element in subsequent language development.

What is extraordinary is that the development of language play in the young child has been so little studied. Kirshenblatt-Gimblett provided an anthropological, cross-cultural perspective in 1976, but speech play seemed to fall out of fashion in the increasingly serious tone of academic linguistic discourse of the following years. In a general review, Ferguson & Macken commented (1983: 249): 'In the sizeable literature on play languages which has come to our attention, we have not found a single study in which children's use of a particular play language is followed developmentally'. And in a review of all issues of the leading journal in the field, *Journal of Child Language*, now over 20 years old, there is no paper on the general phenomenon, and only half a dozen on specific games, mainly from just one researcher. The domain is not mentioned at all in the standard child language anthology of the 1980s (Fletcher & Garman, 1986) nor in the latest child language anthology to appear, *The Handbook of Child Language* (Fletcher & MacWhinney, 1995). However, from the limited literature which exists, some hints about developmental progress, at least for production, can be established (see further, Sanches & Kirshenblatt-Gimblett, 1976).

Phonetic play seems to be the first step. From around age 1, children have been recorded in which long sequences of vocal modulation occur, with no one else around, which have been interpreted as a primitive form of vocal play (Garvey, 1977). Vocalizations accompanying motor activities become noticeable between 1 and 2—melodic strings of syllables, humming, chanting, singing. Symbolic noises increase, and sounds are brought in to represent actions, such as noises to represent ambulances, police cars, telephones, motor horns, and things falling down, and these may be lexicalized (*ding ling, pow pow, beep beep*). Children, often in pairs, begin to 'talk funny', deviating from normal articulation: everyone in the group talks in a squeaky or gruff way, for example, and the sounds themselves seem to be the main focus of the play (a contrast with the adoption of special tones of voice in games of pretend role play, later). They also begin to associate tones of voice with entities: in one babbling monologue, from a child aged 1;3, the babble accompanying play with a toy rabbit was uttered in a high pitch range, and that with a panda in a low pitch range.

Phonetic play is followed by more structured phonological play, from around age 1 introducing prosodic variations, producing language-specific, conversation-like utterance which is often referred to as 'jargon' (Crystal, 1986). From around age 2, variations are introduced into syllable structure, using reduplication, sound swapping, and the addition of pause within a word. Bryant & Bradley affirm: 'the two-and-a-half-year-old child recognize[s] rhyme and produce[s] rhyming sentences with ease: she also changes the very form of words which she knows to suit the rules of rhyme' (1985: 48). Garvey reports one girl of 3;0 who spent nearly 15 minutes engaged in taking apart and varying the syllabic structure of the word *yesterday*—the versions being mostly whispered in a soliloquy as she played with various objects in the room. This kind of play is typically a solitary behaviour, often heard in pre-sleep monologues, as reported in detail by Weir (1962): her Anthony at around 2;6 produced many such sequences of the kind

*bink ... let Bobo bink ... bink ben bink ... blue kink ....* Some were also meaning-related: *berries ... not barries ... barries ... barries ... not barries ... berries ....* We should not be surprised at this: when you are alone in the dark, at this age, there is not much else you can do but play with language. Delight in the sound of words is also reported by James Britton (1970), who tells the story of a small boy, brought to collect his father from a psychology conference, who went dancing through the hall chanting repeatedly the phrase 'maximum capacity'. 'Words are voices' said one 2-year-old, when asked.

Within a year, these monologues can become very complex—Britton calls them 'spiels' (1970: 83). They may be spoken alone or to an audience. An example from Clare, nearly 3: 'There was a little girl called May ... and she had some dollies .. and the weeds were growing in the ground ... and they made a little nest out of sticks ... for another little birdie up in the trees ... and they climbed up in the trees ... and they climbed up the tree ... and the weeds were growing in the ground ...' This is not communicative language: the tone of voice is sing-song, meditative, and there is no logic to the sequence of ideas. It is associative freedom, what Britton calls 'a kind of celebration' of past experience—recall for its own sake, with repetition of favourite strings ('the weeds were growing in the ground' is repeated three more times in the next 10 clauses). It is a primitive poetry. Such speech may be dialogic in form, but the one child performs both parts in the dialogue. If there are other children in the room, they tend to ignore such vocalizations, not treating them as communicative. Sharing of language play seems to follow later. (An exception is the twin situation, where the twins do play with each other's vocalizations, as seen in the report on the Keenan twins (Keenan, 1974).)

Between 3 and 4, children start using each other's play language as a trigger for further variations. They may add rhymes: A says *Go up high*, B says *High in the sky*. They may alter initial sounds, sometimes to make real words, sometimes nonsense words: in one of Garvey's examples, A says *Mother mear (laugh), mother smear*, then *I said mother smear mother near mother tear mother dear*, B responds with *peer* and A adds *fear* (1977: 37). Bryant & Bradley report several examples of rhyme-play by 3- and 4-year-old children (1985: 47), such as *The red house / Made of strouss, I'm a flamingo / Look at my wingo*, and use this as evidence to support their hypothesis about the importance of rhyming and reading ability. By 5, this dialogue play can be very sophisticated. There might also be morphological play, an ending being added to various nouns: *teddy* leads to *fishy, snakey*, and others. Here is another Garvey example, this time between children aged 5;2 and 5;7:

- A Cause it's fishy too. Cause it has fishes.  
B And it's snakey too cause it has snakes and its beary too because it has bears.  
A And it's ... it's hatty cause it has hats.

This is the first sign of children trying to outdo each other in verbal play, trying to score over the previous speaker, or maybe just trying to keep the game going, as in the adult *'armless'* sequence quoted above.

Original sin manifests itself in the young child very early on. Once they learn a way of behaving, or are told how to behave, they seem to experience particular delight in doing the opposite, with consequential problems of discipline for the parent. This is obvious at the nonverbal behavioural level. What is less obvious is that exactly the same process goes on at the linguistic level. Being naughty with language seems innately attractive. If there is a LAD, it seems to be a BADLAD. From as early as 3, children can be heard to home in on an inadvertently dropped adult obscenity with unerring instinct. Within hours of arriving at school they learn their own rude words, such as *bum* and *knickers*, which will keep them surreptitiously giggling throughout the infants. They will be rude at adults or other children by altering the sounds of words: *Dad Pad* said one 5-year old to me in a real fury, as he was stopped playing in order to have a bath. His whole demeanour showed that it was the worst insult he could imagine saying, to express his disapproval. And name-changing is done for fun, too. Nonsense names might be *Mrs Poop, Mr Ding, Mr Moggly Boggly*, all coming from 4-year-olds. Nicknames appear soon after, and certainly after arrival in school. Older children often deliberately misname for fun, calling a cup a saucer, or mislabelling the objects in a picture.

They break pragmatic rules, e.g. saying *good morning* when it is night time. I think all parents have encountered the 'silly hour' when they seem unable to get their child to talk sense.

Verbal play exists in many forms by 6, both serious and humorous, and rapidly increases in sophistication over the next few years. They demonstrate sophisticated concatenation games, in which one rhyme is joined to another in a list (Sanches & Kirshenblatt-Gimblett, 1976: 88). Verbal games such as 'Knock-knock' and 'Doctor doctor' become fashionable after age 7. Riddle comprehension grows (Fowles & Glanz, 1977), and the type of riddle used increases in sophistication (Sutton-Smith, 1976). Wolfenstein's classic study (1954) shows how joke preferences and performances vary with age (from 4 to 17): she found an important transition at around age 6, from the improvised and original joking fantasy to the learning and telling of ready-made jokes (typically the riddle): 'With striking punctuality children seem to acquire a store of joking riddles at the age of six. As one six-year-old girl remarked: "We didn't know any of these jokes last year". Then later, at around 11, the formulaic structure of riddles gives way to a freer and more elaborate narrative.' Metaphor studies also show a growth in awareness well into the teenage years (Gardner, Kircher, Winner & Perkins, 1975). More 'intellectual' language games, often of great intricacy, begin to be used. Cowan (1989) monitored a boy's acquisition of Pig Latin (where the onset of the first syllable is shifted to the end of the word, and followed by [ei], e.g. *please* becomes *izplei*) throughout the year preceding first grade (5;3 - 6;5). At the beginning of the period, the boy seemed unable to transform any words, after an explanation of the game, but performance improved over time. Cowan and his colleagues have also studied backwards speech in some detail, indicating some developmental changes in the ability of children aged 8/9 to talk back-to-front (Cowan & Leavitt, 1982; 1987; Cowan, Braine & Leavitt, 1985). Finally, there are the pseudo-intellectual games played by children of around 10 ('If you insinuate that I tolerate such biological insolence from an inferior person like you, you are under a misapprehended delusion': see Sanches & Kirshenblatt-Gimblett, 1976: 101) which continues into the early years of high school (as nicely portrayed in the adolescent use of group solidarity nonsense which is the title of Jack Rosenthal's television play *P'tang yang kipperbang*, 1982).

Statistics on verbal play are few. In several studies on metaphor development, the frequency of figurative language in the language children hear around them is strongly stressed: nearly 40% of teachers' utterances to students in grades 1-8 contain nonliteral uses (Lazar, Warr-Leeper, Nicholson & Johnson, 1989), and its frequency in reading materials for older children is regularly stressed (Milosky, 1994). Wolfenstein makes some useful comments on joking preferences: 'At six or seven about three times as many joking riddles are told as jokes in any other form. In the following three years the percentage of riddles is little over half. At eleven or twelve it is reduced to a third; riddles are being discarded in favor of anecdotes' (1954: 94). In an informal collection, Sanches & Kirshenblatt-Gimblett (1976: 101) found that Opie-type rhymes varied from an average of 1 per child at age 5 to a peak of 6 per child at age 8, thereafter decreasing until about the age of eleven 'at which point interest in many of these kinds of productions drops off sharply and other kinds of verbal art ... appear to be of greater interest' (1976: 102). Esposito (1980) found that word and sound play occurred in 13% of the experimentally elicited utterances of 3- to 5-year olds, though a third of the subjects showed none at all at that age. Ely & McCabe (1994) looked at several categories of language play in children between 5;5 and 6;8, and found instances in 23% of the utterances—almost one in four. Their context was natural discourse, where it is evidently much more common than in experimentally controlled settings or those where a teacher or other adult is present. Language play here was defined broadly: it included distinctive sound play (repetitive, rhythmic or melodic phonation, onomatopoeic sound effects), word play (e.g. rhyming, neologisms, metaphor), role play (adopting another voice), and verbal humour (including riddles, jokes, teases, nonsense remarks, and jokey allusions, such as *What's up doc?*). Sound play represented nearly a third of all language play, showing the persistence of this modality from the first years of life.

It is difficult to escape the conclusion that language play is an important element in language development. The point is nowhere more strongly stressed than in Chukovsky's book (1963: 96), where he refers to 'the inexhaustible need of every healthy child of every era and of every nation to introduce nonsense into his small but ordered world, with which he has only recently become acquainted. Hardly has the child comprehended with certainty which objects go

together and which do not, when he begins to listen happily to verses of absurdity. For some mysterious reason the child is attracted to that topsy-turvy world where legless men run, water burns, horses gallop astride their riders, and cows nibble on peas on top of birch trees'. The various collections of children's play make this point empirically—the vast amount of rhyming material in Opie & Opie (1959), for example, in such domains as counting out, jumping rope, or bouncing ball, much of which is so nonsensical that the only possible explanation can be delight in the sound as such. As the Opies say, at the very beginning of their book, 'Rhyme seems to appeal to a child as something funny and remarkable in itself, there need be neither wit nor reason to support it' (p.17). The 'tumbling and rhyming' (a description by Dylan Thomas) of children as they spill out of school is universal. And if one asks why they do it, there is no better account of the various factors than that provided by the Opies who, commenting on the jingle 'Oh my finger, oh my thumb, oh my belly, oh my bum', remark that this 'is repeated for no more reason than that they heard someone else say it, that they like the sound of the rhyme *thumb* and *bum*, that it is a bit naughty, and that for the time being, in the playground or in the gang, it is considered the latest and smartest thing to say—for they are not to know that the couplet was already old when their parents were youngsters' (p.17).

Piaget and Vygotsky, among others, had already drawn attention to the notion of 'play as practice': children are most likely to play with the skills which they are in the process of acquiring. And Bruner comments that language is 'most daring and most advanced when it is used in a playful setting' (1984: 196). The persisting absence of language play is likely to be an important (though hitherto little remarked upon) diagnostic feature of language pathology. Chukovsky (1963) suggests as much, with reference to rhyme: 'Rhyme-making during the second year of life is an inescapable stage of our linguistic development. Children who do not perform such linguistic exercises are abnormal or ill'. And indeed, children with language delay or disorder are known to have very poor ability even to imitate simple patterns of language play (copying rhythmic beats, for instance), and tend not to use it spontaneously.

But which aspects of language development is verbal play related to? It would seem: all of them. The play as practice model suggests that it makes a major contribution to phonological development through its focus on the properties of sounds and sound contrasts; there are examples of morphological play in the literature, and the riddle is a genre which heavily depends on syntax for its effects; playing with words and names, and the notion of nonsense, suggests a link with semantic development; and the kinds of dialogic interaction illustrated above suggests that there are important consequences for pragmatic development. Sanches & Kirshenblatt-Ginblett (1976: 102) suggest there may be a developmental progress in the child's interests, moving from phonological to grammatical to semantic to sociolinguistic, but the situation is undoubtedly much more complex. Above all, it is suggested that language play, by its nature, contributes massively to what in recent years has been called metalinguistic awareness, which in turn is a major element in language awareness.

It is important, at this point, to stress that language play is not the same as language awareness. In recent years, a great deal of attention has been paid to language awareness in general: there is now a whole journal devoted to the topic (*Language Awareness*, from 1992). But this topic is a very broad one: it includes, for example, adult awareness of the functions of different languages within a community as well as issues to do with the learning of foreign languages. Language play is just one piece of the evidence to show that children are developing their linguistic awareness. Similarly, language play is not the same as metalinguistic awareness. The latter is also a much broader notion, including all reflective activity relating to language. Metalinguistic awareness is the ability to understand and use words and terms for talking about language (from the most primitive, such as describing a tone of voice as 'high' or 'loud', to the most complex, such as describing the syntactic structure of a subordinate clause). Much of the above discussion is only indirectly related to metalinguistic skills, and conversely, a great deal of what goes on under the heading of metalanguage is nothing to do with language play. Ability to name the letters of the alphabet is part of metalanguage, but is not language play. The same applies to a child's ability to say that certain words begin or end with the same sound, or to describe words as nouns and verbs: this is not part of language play. On the other hand, language play and metalinguistic skills have one thing in common: they both involve the person

'stepping back' from language—in the case of language play, by intuiting the norm and manipulating it; in the case of metalinguistic skills, by talking about what is normal or abnormal.

The relevance of all this to later language skills should be apparent. Sanches & Kirshenblatt-Gimblett (1976: 105) conclude that 'speech play is instrumental to the acquisition of verbal art' (by which they mean eloquence, rhetoric, poetry, etc.). And there is an equally apparent link with reading: several authors have concluded that the ability to manipulate language is associated with success in learning to read. We know that early awareness of nursery rhymes can predict later literacy skills (Bryant and Bradley, 1985), and ability to understand riddles seems to have some relationship to reading ability, both according to teacher report (Hirsh-Pasek, Gleitman & Gleitman, 1978) and in relation to a reading ability test (Ely & McCabe, 1994). Phonological awareness has been isolated as 'a major determinant of the early acquisition of reading skill and one of the keys to the prevention of reading disability' (Stanovich, 1987: 22). Play with language is a direct contributor to metalinguistic awareness (Cazden, 1976), and as reading and writing are first and foremost metalinguistic tasks—they are both one remove away from the natural state of speech, and in almost all cases are interpreted through the medium of speech—it is obvious that language play is likely to relate to later literacy achievement.

### Language play and reading

So far, I have drawn attention to an important (albeit academically neglected) area of adult linguistic behaviour, language play, and suggested that this has played an important role in child development from birth. As the verbal play in my title suggests, what starts as babble ends up as Scrabble. From here, we could move in several directions—how this kind of play might be important for the development of personality, rapport, creativity, and other social and cognitive skills. But our topic today is reading. The question I must now ask, accordingly is: to what extent should we take language play into account in evaluating reading skills and materials, and how exactly should we take it into account? I think it is now axiomatic in our profession that the more we know about the linguistic skills of children, both in terms of comprehension and production, as they begin the task of learning to read, the better we shall be able to present them with literacy tasks which build systematically on what they know and do, and do not conflict with it (Clay, 1979; Ferreiro & Teberosky, 1983). This axiom has motivated a great deal of research in such areas as vocabulary selection in early readers, the choice of sentence construction, and the selection of more realistic sociolinguistic models of the children's universe—what Baker & Freebody (1989) call the 'culture of literacy'. There are also many books which capitalize on Chukovsky's 'topsy-turvy world'—in *Wacky Wednesday*, for example, a child wakes up, and finds that everything is wrong: a shoe is found on the ceiling, a palm tree grows out of the toilet—but the language which describes these bizarre happenings is totally conventional. Our authors and illustrators are very ready to play with situations, it seems, but hardly at all with language.

Beginning with traditional reading schemes of the 'Janet and John' variety, I read through some 200 early readers from the pre-1970s, in preparation for this paper, and could not find a single example of language play. Baker & Freebody, using an Australian corpus, make no reference to it at all in their thorough account of early school books (1989), and their copious examples show no sign of it. There are certain types of exception—in the more adventurous phonic readers, for example. Dr Seuss is the classic case; indeed, his *Fox in Socks* (1965) is sub-titled 'A Tongue Twister for Super Children', and the first page advises: 'Take it slowly. This book is dangerous', as is plain when we find such sentences as 'Fox on clocks on bricks and blocks' or 'Six sick bricks tick'. But apart from this, you have to go back to Victorian times, in the comic alphabet books of that period, before you find a genre which is willing to routinely incorporate language play. Although the contrasts between the relatively unreal linguistic world of traditional (i.e. mid-20th-century) readers and the greater reality of modern materials have been often recapitulated, I have never seen the lack of language play in the former stressed, yet it may be the most dramatic difference of all.

Even if we look for the most established category of language play, the use of imaginative figures of speech—metaphors and similes, in particular—there is little to report. Taking some books at random: in the whole of *Ladybird* 6a (Murray, 1964), there is only 1 such figure in 333 sentences ('*The time does fly*', says Jane). Three stages later, there is only 1 in 403 (9b:

*This cupboard is like a treasure house*). There is nothing at all in the early books of 'Janet and John' (O'Donnell & Munro, 1956); and even well into the series, in *High on a Hill*, we find only 11 instances in 256 sentences (e.g. *a sleepy little river, The white gate was wide and friendly, lily leaves spread themselves like green plates, and frogs made a chorus*), but that is still only 1 in 23. The only category of figurative language which occurs with any frequency is personification, such as when a bird is given the attributes of a human being, and the story talks about his family, friends, furniture, etc. The contrast with earlier speech norms is striking.

Is it too much to suggest that the lack of a perspective derived from language play is the biggest single factor hindering children from seeing what the task of reading is all about? (Indeed, the conventional wisdom of describing reading as a 'task' illustrates the mind-set which is endemic. None of the examples in the first two parts of this paper could be sensibly described as a 'task': it is not a task to tell a joke, or make a silly rhyme, or see a figurative resemblance.) If language play is the normal perspective for pre-school children, how far will the lack of this perspective become a barrier, as they try to acquire another linguistic skill? If it is not present in the reading materials they see or, perhaps more importantly, in the attitudes of those who work with those materials, what follows? If absence of language play is a sign of pathology (see above), then how are we to interpret the textual dimension of early readers? How much, indeed, have readers improved in this respect in recent years?

My impression is: not a lot. This is not to gainsay the enormous progress there has been in narrative technique and visual presentation. Readers these days (whether structured or 'real') typically display thematic relevance, with imaginative and ingenious story-lines taken from what we know to be motivating in children's everyday experience and fantasy. The dialogue can be colloquial and vivid. But from a ludic point of view, the text is invariably sanitized. Daring departures from the norm are far more likely in the situation or illustration (as in the incongruities of *Wacky Wednesday*) than in the accompanying text. The books may be full of wonderfully bizarre situations, such as an alien spacecraft crashing into the sea, but the text is, by contrast, linguistically conventional—*Splash!*, for example, rather than *Splosh!*, *Splooosh!*, *Kerashhh!* or any of the other crazy symbolic forms which are so much a part of the child's comic world. Any comic, in fact, will show vastly more sound symbolic creativity: in one *Desperate Dan* annual, we see him use a range of emotional vocalizations which include (just taking letter Y) *yah, yahoo, yeeha, yeow, yeuch, yeurgh, yikes, yip-yip, yipes, yowch, and yup* (see further, Crystal, 1995: 250). We tend not to see this kind of thing in reading books. The amazing creativity which has characterized children's readers in recent years has been channelled very largely into character and plot, rather than language.

Of course, there are exceptions, but you have to search a long time on your bookshelves before you find them. Here are some examples from my shelves. The nonsense names in Lonzo Anderson's *The haganinny* (Level 9.2 of *Reading 360*) are a cross between Lewis Carroll and Star Wars: 'The worst day of my life, I guess, was the time I made that trip into the zangles of Arroom. / I had been hired by the Blazon of Ammerwok to hunt down the hateful haganinny that was threatening the Blazon's people who lived in the zangles.' *Fuzzbuzz* Level 2 contains a story in which a jester tries to cheer up a grumpy king by actually telling him a riddle (and it takes the king a while to get it). *Mount Gravatt* Level 1: 24 has a booklet called 'Monster Things' which has a triple rhyming sequence: 'I'm making monster things on the wall. / This one's got paws, / and claws, / and two big jaws.' It is the extension to three rhymes which makes this interesting—going beyond the expectations of the traditional rhyming couplet. *Gay Way* (Pink Level Core Reader) presents a Lewis Carroll *doublet* game, as the reader crawls down a caterpillar from *cup* to *wet*, with each word changing just one letter at a time. The *Jets* series (1993) illustrates the use of phonetic play in its titles: *Grubble Trouble, Sharon and Darren*—and indeed in the latter case, the opening lines make a metalinguistic point: 'I've got a boyfriend. / His name is Darren. / Sharon and Darren - / we make a poem.'

Reading schemes which involve the child in truly imaginative play are much more prepared to be linguistically daring. A clear example of this at the very outset is in Level 1 of *Mount Gravatt*, where we inhabit a universe of pretend (playing buses, making shapes) and negative facts (*I'm not a bird, or a dog, or a fish ...*), which is a short step away from metaphor. Choosing 10 booklets at random (2, 5, 9, 13, 17, 19, 20, 22, 23, 30), I found 6 items in 100 sentences (1 in

17): see the similes in *A little seed and a big tree (like a ...)* and the metaphors in *I'm the wind (I'm making a song in the leaves)* and *Rain (The raindrops make a river in the gutter)*. Although this is still very low, better ratios are hard to find.

Most scheme readers do not seem to favour this kind of innovation (but I would welcome examples to the contrary). Rather, the world of formal readers is one where language play is conspicuous by its absence. To the child, surely, Wordsworth's words must therefore seem particularly apt: 'Heaven lies around us in our infancy! / Shades of the prison-house begin to close / Upon the growing boy' (*Intimations of Immortality*). The prison-house metaphor suggests that children come to reading prepared by their previous experience of language play to have fun, then find that there is no fun there. They encounter a world which (I say again, in *language* terms) is serious and conventional. Beautiful pictures; lovely story; linguistically unimaginative text. And before very long, by copying older children, the teachers, and the textbooks, they become linguistically conventional themselves, and models for the next generation. Developmental studies have actually observed this process taking place. In 1975 a study by Howard Gardner and colleagues looked at the development of what they called 'metaphoric skill' in children between 4 and 19 years, using a simile completion task (e.g. *as big as ...?*). The pre-schoolers used some empty and conventional allusions (*as tall as you, as cold as snow*), and demonstrated some possible confusions (*warm as snow*), but produced several creative endings (*sad as a pimple, soft as a rainbow*). The 7-year-olds were more literal, concrete, and conservative (*soft as a pillow, bright as the sky*). The 11-year-olds were also quite concrete and conventional, but imaginative elaborations began to increase. And some interestingly vivid comparisons emerged at ages 14 and 19 (*warm as a summer's night in Montana, colours as light as an old folk tune*). The most surprising finding was that the pre-schoolers produced a higher number of metaphors than any other age group. This impressed Gardner *et al*, who called it 'surprising precocity', which, they thought might simply reflect incomplete knowledge of the meaning of a word (as in the 'warm as snow' confusions), but, they conclude, rather more likely suggests an ability to be creative: 'The young subjects may have produced appropriate metaphors because conventional responses are less likely to vault to mind; they are more willing to follow their sensory imagination, and to throw caution to the winds' (1975: 135). Older subjects, in other words, increasingly learn conventional means of metaphorical expression, become less willing to be creative, to break the rules. In short, they conform.

I am not arguing here for social psychological revolution. Conformity is not my *bête noir* in this paper. I accept that linguistic conformity is integral to society, and reading must introduce children to it. But conformity has to take its place alongside creativity, and my argument is therefore threefold. First, given the amount of language play in pre-school child society, there should be a principled transition in early readers enabling children to move from a world in which language play is so important to a world in which language play has been so marginalized. Second, given the amount of language play in adult society, it should be possible to encounter it more regularly in a child's reading world than is currently the case—to make it less marginal. Third, because there is so little, linguistically, in early readers which children can use as a model to refine their creative language interests and skills, readers give children no basis for approaching the more imaginative domains of language use, such as poetry and satire, and may actually impede the implementation of a child's creative urge. Something ought to be done about that, too. In talking to children over the years, I am left in no doubt that they have a view that certain kinds of linguistic inventiveness are definitely 'out of bounds', as far as using them in writing is concerned, and this must partly be the result of lack of models in reading or teaching. All three arguments amount to the view that there is an enormous gap between the world of child reading and the world of real language. Whatever else reading schemes are, they are certainly not perceived as fun. This is not to deny that children find readers from many schemes these days highly enjoyable; but enjoyment is not fun. I enjoyed writing this paper, but it was hard work, not 'fun'. So-called 'real books' are, by contrast, regularly perceived to be fun. And the distinction between these two categories, from a linguistic point of view, is chiefly a matter of their willingness or otherwise to engage in language play.

### From creativity to intervention

Is it possible to bridge this gap, and thus move from one form of creativity, through intervention, to another? Is the way forward to increase the language play perspective in conventional reading materials, and promote a readiness to play with language texts on the part of teachers and others? There is certainly evidence to show that it is *possible*, but I can only speculate about the full implications of such a perspective. I shall take an example from each linguistic level.

#### Phonology

Some poems, anthologies, and stories are based entirely on language play (as illustrated in Foster, 1985), and much of the humour is phonological. Nonsense names, for example, are found throughout: the Bongaloo, the Yellow Oozit, Isabella McSpeet (who had very flat feet), the Pobble, and the Bumble Boo. There is delight in words as sound. The different verses of Dennis Lee's 'On Tuesdays I polish my uncle' build up by degrees: verse 5 reads:

I started the ark in the dark.  
My father was parking the shark.  
And when we got home we had ants in our pants,  
Dirt in our shirt, glue in our shoe,  
Beans in our jeans, a bee on our knee,  
Beer in our ear and a bear in our hair,  
A stinger in our finger, a stain in our brain,  
And our belly-buttons shone in the dark.

There are patterns of sound symbolism in this literature which will never be lost (Crystal, 1995: 250). But, without wishing at all to belittle the creative achievement of these authors, they are only doing in a highly crafted way what children do naturally all over the world, as the Opies, among others, have illustrated (1959).

Similarly, it is possible to introduce a bridge between structure and use in written work. A good example of a more structured approach to writing, again grounded in the principles of language play, can be found in James & Gregory's splendid (though much undervalued) book, *Imaginative speech and writing* (1966), which so strongly supported linguistic innovation in written work. This project showed that, with appropriate support, children are very ready to continue using language play in writing. For example, in a section devoted to the way sounds move into words, James & Gregory illustrate a story by a 7-year-old using made-up words, called 'Putting up the fair': Glunk glunk glunk glunk / Lock lock lock lock / Buzz Buzz Buzz Buzz / rolla clatter rolla clatter / patter patter / tip tip tip / wing wang wing wang / bang bang / clatter clatter / squeek squeek / clug clug clug / bang'. Other sections deal with playing with intonation and stress, nonsense verse, and various kinds of sound symbolism.

#### Graphology

At this level, the chief examples are all letter-orientated, as part of the task of improving letter recognition. The **genre** of comic alphabet books have been doing this since Victorian times, and there have been many stories in which individual letters are personified, given families, get lost, and get into various (spelling) scrapes. Typical of the enlivening alphabet book are Eric Carle's *All about Arthur (an absolutely absurd ape)* (1974) and John Burningham's *ABC* (1964); the story genre can be illustrated by Richard Scarry's *Find your ABC's* (1973). The classic example of graphic play is Lewis Carroll's experiments in type size and layout in the 'Alice' books. As this is a familiar domain, I shall not dwell on it here.

#### Grammar

A fine example at this level is the *Find a Story* technique used in the 1970s in the supplementary course published by Penguin Education called 'Reading and Language Development', by Maureen Vidler. Each book contained a number of sentences with a similar syntactic structure. By carefully laying out a sentence down the page, and horizontally cutting each page between different parts of the sentence, 150,000 different stories could be created by combining the strips in different ways. In Book 5, for example, the first page reads 'Did you know / that huge hairless / hippos / keep cool by / wallowing in mud?' By turning the middle strip over, the child can replace 'hippos' by 'little boys / slugs / poodles / young girls / baby elephants /

headmasters / goldfish / grandmothers / policemen / teachers'. By turning the bottom strip over, 'wallowing in mud' can be replaced by 'wearing ribbons on their tails / standing on their heads / squirting water down their noses' and others. Children invariably want to make their own books along these lines—though they need help, for it is harder to do than they imagine—and given that it is possible to tightly control and grade the sentence structures involved, a neater bridge between language structure and language use is difficult to imagine. It is an exercise in the identity of phrase and clause elements, totally motivated by the forces of language play.

### *Semantics*

There are, of course, many word books which present vocabulary in an entertaining manner: Richard Scarry's *Best word book ever* (1964) must represent this genre—but this is again situational play, not language play. Rather fewer books play with the meanings of individual words. Joan Hanson's series on antonyms, homonyms, homographs, and synonyms is one such exercise (1972). In *Homonyms*, for example, we see funny drawings on opposite pages representing word pairs which sound the same but have different meanings, such as *hare* and *hair*. At the level of discourse, we occasionally find a scheme which devotes a book to language play: *Jokes, jests and jollies* is a collection of jokes, puns, riddles, and tongue twisters as part of *Reading 360* (Level 9, Book 3). *Fortunately* (by Remy Charlip, 1964) is entirely based on a spread-by-spread contrast between a happy situation (*Fortunately, there was a parachute in the airplane*) and an unhappy one (*Unfortunately, there was a hole in the parachute*). However, the publication of a separate book is by no means the same as an ethos of language play diffused throughout a series, and it is unusual to see this effort being made. The *Skylarks* language development programme (Bevington & Crystal, 1975) was one such attempt. Several of the early booklets, which aimed to provide a transition from single-sentence texts to sentence pairs, used unexpected sequences of ideas, typical of the world of language play (e.g. A2, on clause sequence: *Ducks quack, but they can't sing; Frogs croak, but they can't play the flute*; A7 on sentence sequence: *Fish don't wear pyjamas. What about whales?*); by the end of the series, a whole booklet is devoted to figurative language (F8: *Waves of shadow went over the wheat; The snow wrapped the land in a cloak of white*).

### *Pragmatics*

Introducing language play is one way of effectively reducing the chief problem in pragmatics—finding topics which interest children, motivate teacher-child interaction, and avoid the problem of 'postillion sentences' (Crystal, 1995). These sentences take their name from the legendary sentence in foreign language learners' phrase books, *The postillion has been struck by lightning*, cited as an example of a useless sentence, because no learner would ever have occasion to use it (notwithstanding the occasion when there really was a thunderstorm during the Lord Mayor's procession in London). Traditionally, pragmatic issues were disregarded in reading books. A picture of a cow would have a caption sentence: *This is a cow*. The point here is to note the remove from daily reality. When would the sentence *This is a cow* ever be used in everyday speech? One does not usually talk about what is obvious (from the picture, in this case). To have such sentences permeate a reading scheme is to distance that scheme from the foundation of usable spoken language that the child has already acquired. It does not take much to turn such language into usable, reinforcing language. Partly hiding the cow behind a barn in the picture, and asking *Is that a cow?* makes it a real sentence—and even more would be a context where a worried adult asks the same question, unsure whether the animal approaching him is a bull! Some authors have taken this message on board totally—Rod Hunt, for example, in the *Oxford Reading Tree* series. Or, to take an example closer to home, *Who am I?* (Book 13 in *Mount Gravatt* Level 1), where we see the parts of an animal gradually unfolding, and the reader is presented with a guessing game (*I'm not a dog. I'm not a cow. That's not my milk...*).

Of course, it is a risky business, entering the real world of children's talk. You have to be prepared to include some surprising vocabulary. Faced with a picture of a meal on a plate, children do not describe what is on the plate, but talk about their likes and dislikes, directly or indirectly. *Where's the tomato sauce?* was one such reaction, evidently, when Hunt was investigating caption material for his illustrations. A great deal of vocabulary arises from the world of language play. *Gallop*, for example, turns up as a verb of similar frequency to *hear* and *hold* in Raban's 1988 report on the spoken vocabulary of 5-year-old children—because this is a word the 5-year-olds used frequently as they played at 'being horses' in their school

playgrounds. Moreover, you have to decide what to do about the vocabulary which is not so pleasant. Raban's report includes such items as *kill, gun, bombs, and bullets*—presumably (I hope) also reflecting a world of play—as well as *bum, bugger, titties, and fart* (this last as frequent as *bath* and *clock*, and, interestingly, as *God* and *Guinness*). There is something fascinating about any survey in which *Henny Penny* turns up in the same frequency range as *machine gun*. It seems there can be murder even in fairyland.

### *Sociolinguistics*

We can even play with language variety. To take just one example, from spoken varieties based upon writing, in the BBC radio series 'Patterns of language' (1986), the 15-minute programme on 'Put it in Writing' begins with the familiar sound of the six pips introducing the news. The script then runs as follows:

This is the six o'clock news. Now, let me see, oh yeah ... there's been a fantastic traffic jam in London this afternoon, you know - really amazing - went on for, oh I dunno, about three hours, more or less, before the coppers came in and sorted it all out. Oh, and another thing, the poor old Prime Minister got stuck in it too...

The presenter sternly intervenes:

Hold on a moment. That's not the right sort of language for a news broadcast! You sound as if you're chatting on the street corner. This is a schools programme, you know. You should get it right.

The announcer apologises—he just felt like a change, that's all—and then does it again properly:

This is the six o'clock news. One of the largest traffic jams which London has seen for some time took place in the city this afternoon. ...

And the programme continues with a discussion of the reasons for the differences between speech and writing.

### *Metalanguage*

Books are becoming increasingly daring, in the extent to which they not only make use of language play, but devise plots which are totally dependent on the children's capabilities in this respect. This can be seen in two very different publications. In the 'Dr Xargle' series, Jeanne Willis has 'translated into human' books written by the alien, Dr Xargle, who is attempting to teach his pupils how we live on earth. In *Dr Xargle's Book of Earth Tiggers* (1990) and other books we are presented with the babytalk of adults, as well as a great deal of play with patterns of word structure: *beddybys, walkies, leggies, tigger* (cat) and *tiggerlet* (kitten), *houndlet* (puppy), *earthlets* (people); new words are used, such as *stinkpod, meatblob, cowjuice* (milk), *muckworm, gibble* (found in dustbins), *pigrolls* (sausages), *fishstick* (goldfish). There is even play with spellings: *feelers* are *pheelers*.

Secondly, in *The True Story of the 3 Little Pigs* (by A. Wolf, aka Jon Scieszka), we see the language of a traditional story pulled and pushed in several directions—in effect, a play about a play:

Everybody knows the story of the Three Little Pigs. Or at least they think they do. But I'll let you in on a little secret. Nobody knows the real story, because nobody has ever heard *my* side of the story. . . .

Way back in Once upon a Time time, I was making a birthday cake for my dear old granny. I had a terrible sneezing cold. I ran out of sugar.

So I went next door to ask if I could borrow a cup of sugar. Now the guy next door was a pig. And he wasn't too bright, either. He had built his whole house out of straw. Can you believe it? I mean who in his right mind would build a house of straw?

And so the story continues: the cold makes his nose itch, he huffs and puffs, sneezes, and the house falls down; the pig dies in the accident, and, as Al the Wolf says:

It seemed like a shame to leave a perfectly good ham dinner lying there in the straw. So I ate it up. Think of it as a big cheeseburger just lying there.

The success or otherwise of this book depends on the child's ability to recognize the language (not just the story-line) of the original. We are in the same position when we watch Tom Stoppard's *Rosencrantz and Guildenstern are Dead*.

There is no reason, moreover, why a play perspective should not imbue the teaching of more advanced metalanguage, such as grammatical terminology—though of course the kind of play introduced must be carefully related to the level of maturity of the child/student. In *Language A to Z* (Crystal, 1991), aimed at middle secondary school pupils, the play is of a more sophisticated kind than it would be in the junior school. For example, in introducing the concept of a sentence, the text begins by introducing a detective-story cliché:

The police burst into the room. Murphy lay on the settee, his chest covered with blood. Branson went over to him. There was very little time. 'Who did it, Murphy' Branson put his ear next to the dying man's lips. 'Who did it?' Murphy's eyes flickered. 'It was ... It was ...' His head fell back. Branson cursed. Their last lead had gone.

And the text continues:

Branson's problem was that Murphy didn't finish his sentence ...

Any such point can be vividly reinforced by good cartoons, which are always much appreciated at the older level.

### Everything at once

What is especially fine is to see language play in action using all linguistic levels simultaneously. The best example I have seen of this happening in practice is from the 'Jets' series: *Ernest the Heroic Lion-tamer* (Burnard, 1993). The main text is supplemented by accompanying cartoons, in which can be found a great deal of language play—people make comic-like noises (*Aaah!*, *Cor!*), as do objects (*Ker-blam*), make smart remarks about what they see (*She's hot* says someone at the sight of the fire-eater), use pseudo-intellectual language (cf. above) (*Jollity! Jollity!* says someone, at the sight of the clowns), use 'clever' word play (*Splats entertainment, folks*, says another), and make rhyming lists (says the ringmaster to Ernest: *it's time to act on the fact of what your act lacked. With tact; it's time for your act to face facts.*). At several points in the book, cartoons play with the meaning of an idiom. The text says ... *the drums rolled*, and this is followed by a picture of a drummer chasing his drum and calling *Stop rolling!*). As the lion-tamer is about to put his head inside the lion's mouth, the text says *Not a soul stirred*; this is followed by a cartoon showing several members of the audience, one of whom is seen to be stirring a cup of something; *Except me!* he says, and around the spoon can be seen the words *Stir! Stir!*, using the standard comic technique of verbalizing object noises. There is pragmatic fun, also, as the voice of the reader is seen in a speech bubble making an observation about the way the story is being told. Language play is thus an integral part of the text. Indeed, in the case of Ernest, there are two levels of play, for there is metalinguistic awareness invoked as well. For example, the conversation interaction between author and reader continues over the first 34 pages, but on p. 35, the *main text* includes a request to the reader not to interrupt so much, and this is immediately reinforced by a cartoon of Ernest also telling the reader to *put a sock in it*. And on the last page, Brian the lion, who has saved the day, asks Ernest: *if anyone ever writes a book about us ... promise me it'll be called 'Ernest and Brian', and not just 'Ernest the heroic lion-tamer'*. *I promise*, replies Ernest, ironically.

### Structure and use

It is evident from these approaches that reading and writing do not have to be a prison-house. It is possible, with motivation, a realistic perspective, and ingenuity, to write or adapt materials to take account of language play, at any level of language structure or use.

But in intervening, it is important to note that language play can only be a part of any solution to the problems we encounter in the teaching of reading. Language play may be the most creative part of language acquisition, but there is a great deal else going on, which is nothing to do with

language play—or, at least, if a play-as-practice model is adopted, which is only indirectly related to it. I take it as axiomatic that the teaching of reading has to be viewed within a developmental perspective, but if we believe this, then we cannot pick and choose. If we wish to write or evaluate reading materials on the basis of the phonological, grammatical, semantic, and pragmatic knowledge which children have available once they approach literacy, then we must consider *all* of this knowledge at once, as far as we can. One reason for this is that we know from several studies of linguistic processing that there is an interaction between the different levels of language: when children are making progress in, say, syntax, it is often at the expense of phonology; learning new structures or words is often accompanied by non-fluency, for example (see Crystal, 1987, for a review and an illustration). It is a commonplace of teaching that working on X can result in an apparent regression in Y; and nowhere is this more apparent than in language, where several levels of structure are emerging simultaneously. To revise reading materials so as to make them reflect a more creative linguistic world could come to grief if other developmental linguistic principles are ignored in the process.

The interactive view of linguistic processing, in developmental linguistic terms, means maintaining a balance between the different levels of language structure and use, as one tries to teach a new linguistic skill, such as reading or writing. Simplifying vocabulary has consequences for grammar, phonology, and pragmatics. Simplifying phonology (as in phonic work) has immediate consequences for the other levels (indeed, finding intelligible sentences while being restricted to a limited phonological range has traditionally been the chief problem facing those engaged in writing phonic readers; cf. Dr Seuss, above). Simplifying grammar has consequences for the other levels, too, especially semantics (how to maintain a coherent and natural sequence of sentences) and pragmatics (how to plausibly represent interaction). To introduce features of language play without considering how these features relate to other aspects of language structure and use would be to risk introducing a further imbalance which could hinder rather than help the acquisition of literacy. A focus on language play should not replace the consideration we have been giving in recent years to sensibly graded sounds, words, and grammatical constructions; rather, it should complement it. Here are two examples of the kind of grading whose value remains undiminished by any fresh focus on language play: one from syntax, one from typography.

First, syntax. It is now over 20 years since child language researchers demonstrated the importance of clause element weight (Quirk, Greenbaum, Leech & Svartvik, 1985, §18.9) as a factor governing the order of emergence of certain kinds of syntactic structure in English. Clause weight relates to the number of items (here I illustrate only from words) which occur at different points in clause structure. In the clause *the dog saw the cake*, there are two words as subject and two as object, so the weight is equal; in *he saw the nice cake* or *he saw the cake on the table*, the weight has moved to the right; and in *the hairy dog in the garden saw it*, the weight has moved to the left. In over 95% of clauses in informal English conversation, the weight of the clause is to the right. They tend to begin with a simple pronoun, name, or two-element noun phrase (e.g. *the dog*). In the very informal data recorded in *Advanced Conversational English*, only a handful of clausal subjects are over 2 words long. For their data as a whole, Quirk *et al* show (§17.124) that 85% of all clauses have a simple subject (defined as Name, Pronoun, or Determiner + Noun), this falling to 68% in prose fiction (and to 34% in scientific writing).

Children evidently sense this weight distribution early on, and soon after age 2 are beginning to shape their clauses accordingly. There is a gap of some 3-6 months between post-verbal and pre-verbal noun phrase expansion (see the discussion in Crystal, Fletcher & Garman, 1989): children at 2;3 are likely to be using an adjective before the noun in object position but not in subject position, or adding a prepositional phrase after the noun in object position (*the dog in the garden*) but not in subject position. This is a very definite developmental preference, even though the factors which account for it are not entirely clear (intonational prominence falling towards the end of the clause is one factor). One might therefore expect books which claimed to be using a developmental linguistic perspective to demonstrate a similar kind of clause weight bias, and to increase their subject complexity gradually. Certainly most early readers do have very simple subjects, but one does also regularly encounter clauses which go against this trend, such as (from several schemes: I highlight the subject and the post-verbal element) *A tall red jug stood next; One little kitten runs to the basket; Sam the fox went down the hill; The baby*

*is little - My teacher is big; Miss Brown and the children were ready.* And as levels of difficulty increase, there is little sign of any grading. Without warning, especially in intermediate-level information books, children can find themselves in a linguistic world where clauses have a complexity close to what we would expect to find in adult scientific texts: *Some of these old cars, like the one shown opposite, are still running ...; Even factories a long way away might have to make alterations ...; A full-size 'mock-up' of the car is made of wood ...; Many of the machines which make parts for the car engines do not need men to work them... ; If any part of an automatic transfer machine goes wrong...*' (from *The Car Makers*, Title 13 of Series 606B, People at Work, Ladybird 'Easy-Reading' Book, 1968).

It is unusual to find children's authors breaking the clause-weight norm—presumably because they are good at using their intuitions to capture the realities of child speech. Damon Burnard, in Chapter 1 of *Ernest the Heroic Lion-Tamer*, has 19 clauses totalling 141 words (I exclude a couple of awkward cases, e.g. where the clause is split between text and cartoon), an average of 7.4 words per clause; 14 of these 19 clauses have a subject which consists of either a single word or Determiner + Noun (a ratio of 0.74), and no pre-verbal element is longer than the post-verbal one. Similarly, the opening half-a-dozen pages of Roald Dahl's *Charlie and the Chocolate Factory* contain 41 clauses totalling 359 words (again excluding a some awkward cases, e.g. verbless clauses), an average of 8.8 words per clause; even though the clause length is longer, his sense of clause weight is virtually identical to Burnard's: 31 of the 42 clauses have the same array of short subjects (a ratio of 0.76), and no pre-verbal element is longer than the post-verbal one. The overall impression of Dahl's language is one of greater complexity than Burnard's, however, because only one of Burnard's clauses is over 10 words (14 words), whereas 10 of Dahl's are (the longest being 23 words). (The average clause length is not greater because Dahl also uses several very short clauses, of 3 or 4 words, whereas Burnard never falls below 5.) Taking Burnard and Dahl together, 75% of their subjects are simple, which is a figure falling mid-way between the norms for adult conversation and adult prose fiction in the Quirk sample (85% and 68%). Samples taken from reading schemes, by contrast, fluctuate wildly—from 100% (in the most highly structured and repetitive texts, in which every statement begins in the same way, e.g. Level 1 readers in which most sentences begin with a pronoun) to under 60%. The examples from Dahl and Burnard show that such fluctuation is not inevitable. It would also be a straightforward matter to introduce structural grading into any sequence of readers, but I should be surprised to find a reading scheme which has done so.

Clause weight is just one developmental linguistic finding which, independently of considerations to do with language in use, can act as a principle for grading the increasing complexity of reading material. There are several others (cf. Crystal, 1984: Ch.5). It is a developmental finding, in the sense that it originated in observations about the emergence of children's speech. My second example of a ubiquitous structural principle is not developmental in origin: this is from the domain of typography. Everyone knows that the visual interruption provided by a line-ending can introduce non-fluency into reading production, or interfere with comprehension, especially in the immature reader. Research carried out in the 1970s tried to formalise our intuitions, in this respect, to rank order the kinds of difficulty presented by lines which end at different places in sentence structure (Raban, 1979; Crystal, 1979). Hyphenation, obviously, was always a problem. A line break after a determiner, for example (*the, a, my, etc.*), was also likely to be problematic. By contrast, a break at a phrase boundary was not, and a break at a clause or sentence boundary even less so. Certain ambiguous points (e.g. whether reading was facilitated more by a conjunction at the end of a line or at the beginning of the next line) began to be probed. These findings were introduced in the *Databank* and *Datasearch* reading series of information books written for older children with special needs (Crystal & Foster, 1979-85; 1991), but as far as I know have not been implemented on any significant scale. On the contrary, most readers still use arbitrary line breaks, conditioned by the measure made available after other design features have been taken into account (typesize, position of illustration, etc.).

For example, in *Grubble Trubble* (Offen, 1993), we find the following sequence: 'Minutes later, Mrs / Grubble spotted the / notice. It was on the / far side of a smooth / green patch that / looked just like a / lawn. Her face broke / into a grin and / she bounded / forwards. The / next moment she / let out a piercing / scream.' The rhythmical unnaturalness of the line breaks here cannot

possibly help the development of a smooth reading style, and can promote semantic anomalies (*Her face broke!*). There is no right justification, so presumably there is some flexibility over where to put the line breaks. The matter does not seem to have been thought about. Even with a narrow measure, it would have been possible to do something better, preserving a greater degree of semantic coherence within the lines: 'Minutes later, / Mrs Grubbe spotted / the notice. It was / on the far side / of a smooth green patch / that looked just like / a lawn. Her face / broke into a grin / and she bounded forwards. / The next moment / she let out / a piercing scream.' One would not, of course, wish to maintain that a linguistically principled line-break system should be retained indefinitely: there comes a point when the children need to be weaned onto arbitrary line endings, as that is the adult norm. But in the weaning process, there is room for common sense: in an information book, for example, I would introduce greater arbitrariness in a paragraph devoted to a homely anecdote about scientists than in a paragraph giving a technical definition about an aspect of their science.

These examples are cogent instances of the need for a (developmental) linguistic perspective in the teaching of reading; but we must not forget, at this point, that there has never been a thorough implementation of this perspective in relation to this area of pedagogy, for the simple reason that we still know very little about many of the most germane aspects of language acquisition. And even in relation to those areas where research findings are clear, language acquisition is such a large and specialized field these days, with half a dozen journals of its own, that I imagine few people involved in the study of reading manage to keep abreast of all the published work. There may, as a consequence, be a considerable time lag between the discovery of a relevant point and its implementation.

### Conclusion

So, I return to the question with which I opened this paper. Why is there a problem? The examples from syntax and typography illustrate that, as we confront literacy, there is still a major gap between considerations of language structure (whether viewed developmentally or not) and those of language in use (here, in the form of materials for pedagogical intervention). The earlier examples suggest that, as we confront literacy, there is still a major gap between the linguistic world of early childhood and the linguistic world children encounter when they begin to learn to read. These gaps can evidently be bridged, and the thrust of this paper is to suggest that a promising means of bridging this gap is to introduce a perspective from language play. Language play focuses on the uses of structure in a way that is unique. I doubt whether there is any greater motivating force for children (or, for that matter, for adults). If we are to celebrate anything at all, in the spirit of the title to this conference, then surely it must be the gift of language play?

However, the principled application of this frame of reference to classroom practice is still in its infancy. It remains one of the most neglected areas. In a recent detailed review of the most thoroughly investigated topic in early literacy acquisition, phonological awareness, Blachman (1994) refers briefly to language play only once. It seems to be assumed that, when teachers come to implement phonological awareness procedures in their classroom practice, they will automatically use language games to motivate the children. However, there is an even bigger gap here, which needs to be confronted. For, as speech and language therapists have appreciated for several years, it is by no means easy to think up an appropriately motivating and graded language game to implement a diagnostic point efficiently. Models help, but (to continue the present example) the diagnostic work on phonological awareness is conspicuously serious in tone, and I have seen no models incorporating play principles for teachers to use. The situation is complicated by the fact that not all aspects of language play have yet been shown to correlate with metalinguistic awareness measures, and not all with emerging ability to read. Further work on the development of language play will therefore be essential if teachers are to put this new diagnostic systematically into practice. But the first step is the important one: to confront and take on board the message of language play. In the early history of language, written language was always viewed as an event of magic and mystery. I believe that if we focus on language play we can begin to get rid of the mystery which surrounds the task of reading and writing, and put some of the magic back.

## Academic references

- Apte, M.L. 1985. *Humor and laughter: an anthropological approach*. Ithaca: Cornell University Press.
- Augarde, T. 1984. *The Oxford guide to word games*. Oxford: Oxford University Press.
- Baker, C.D. & Freebody, P. 1989. *Children's first school books*. Oxford: Blackwell.
- Blachman, B.A. 1994. Early literacy acquisition: the role of phonological awareness. In G.P. Wallach & K.G. Butler (eds.), *Language learning disabilities in school-age children and adolescents*. New York: Merrill.
- Britton, J. 1970. *Language and learning*. London: Allen Lane.
- Bruner, J. 1984. Language, mind, and reading. In H. Goelman, A. Oberg & F. Smith (eds.), *Awakening to literacy*. Exeter, NH: Heinemann.
- Bryant, P. & Bradley, L. 1985. *Children's reading problems*. Oxford: Blackwell.
- Cazden, C.B. 1976. Play with language and metalinguistic awareness: one dimension of language experience. In J. Bruner, J. Jolly & K. Sylva (eds.), *Play: its role in development and evolution*. New York: Basic Books.
- Chiaro, D. 1992. *The language of jokes: analysing verbal play*. London: Routledge.
- Chukovsky, K. 1963. *From two to five*. Berkeley: University of California Press.
- Clay, M.M. 1979. *Reading: the patterning of complex behaviour*, 2nd edn. London: Heinemann.
- Cowan, N. 1989. Acquisition of Pig Latin: a case study. *Journal of Child Language* 16, 365-386.
- Cowan, N., Braine, M.D.S. & Leavitt, L.A. 1985. The phonological and metaphonological representation of speech: evidence from fluent backward talkers. *Journal of Memory and Language* 24, 679-698.
- Cowan, N. & Leavitt, L.A. 1982. Talking backward: exceptional speech play in late childhood. *Journal of Child Language* 9, 481-95.
- 1987. The developmental course of two children who could talk backward five years ago. *Journal of Child Language* 14, 393-5.
- Crystal, D. 1979. Reading, grammar, and the line. In D. Thackray (ed.), *Growth in reading*. London: Ward Lock Education.
- 1984. *Linguistic encounters with language handicap*. Oxford: Blackwell.
- 1986. Prosodic development. In P. Fletcher & M. Garman (eds.), *Language acquisition* (2nd edn.). Cambridge: Cambridge University Press.
- 1987. Towards a 'bucket' theory of language disability: taking account of interaction between linguistic levels. *Clinical Linguistics & Phonetics* 1, 7-22.
- 1990. Linguistic strangeness. In M. Bridges (ed.), *On strangeness*. Swiss Papers in English Language and Literature, 5. Tübingen: Gunter Narr Verlag.
- 1995. *The Cambridge encyclopedia of the English language*. Cambridge: Cambridge University Press.

- Crystal, D. & Davy, D. 1989. *Advanced conversational English*. London: Longman.
- Crystal, D., Fletcher, P. & Garman, M. 1976. The grammatical analysis of language disability, 2nd edn. London: Whurr.
- Ely, R. & McCabe, A. 1994. The language play of kindergarten children. *First Language* 14, 19-35.
- Esposito, A. 1980. Children's play with language. *Child Study Journal* 10, 207-216.
- Ferguson, C.A. & Macken, M.A. 1983. The role of play in phonological development. In K.E. Nelson (ed.), *Children's language*, Vol. 4. Hillsdale: Erlbaum.
- Ferreiro, E. & Teberosky, A. 1983. *Literacy before schooling*. London: Heinemann.
- Fletcher, P. & Garman, M. (eds.) 1986. *Language acquisition*, 2nd edn. Cambridge: Cambridge University Press.
- Fletcher, P. & MacWhinney, B. (eds.) 1995. *The handbook of child language*. Oxford: Blackwell.
- Fowles, B. & Glanz, M.E. 1977. Competence and talent in verbal riddle comprehension. *Journal of Child Language* 4, 433-452.
- Gardner, H., Kircher, M., Winner, E. & Perkins, D. 1975. Children's metaphoric productions and preferences. *Journal of Child Language* 2, 125-141.
- Garvey, C. 1977. Play with language and speech. In S. Ervin-Tripp & C. Mitchell-Kernan (eds.), *Child discourse*. New York: Academic Press, 27-47.
- Hirsh-Pasek, K., Gleitman, L.R. & Gleitman, H. 1978. What did the brain say to the mind? A study of the detection and report of ambiguity by young children. In R.J. Jarvella & W.J.M. Levelt (eds.), *The child's concept of language*. New York: Springer.
- Keenan, E.O. 1974. Conversational competence in children. *Journal of Child Language* 1, 163-183.
- Kirshenblatt-Gimblett, B. (ed.) 1976. *Speech play: research and resources for studying linguistic creativity*. Philadelphia: University of Pennsylvania Press.
- Language Awareness*. Published by Multilingual Matters, Frankfurt Lodge, Clevedon Hall, Victoria Road, Clevedon, Avon BS21 7SJ, UK.
- Lazar, R., Warr-Leeper, G., Nicholson, C. & Johnson, S. 1989. Elementary school teachers' use of multiple meaning expressions. *Language Speech and Hearing Services in the Schools* 20, 420-429.
- Milosky, L.M. 1994. Nonliteral language abilities: seeing the forest for the trees. In G.P. Wallach & K.G. Butler (eds.), *Language learning disabilities in school-age children and adolescents*. New York: Merrill, 275-303.
- Opie, I. & Opie, P. 1959. *The language and lore of schoolchildren*. Oxford: Oxford University Press.
- Quirk, R., Greenbaum, S., Leech, G.N. & Svartvik, J. 1985. *A comprehensive grammar of the English language*. London: Longman.
- Raban, B. 1979. Reading and line-breaks. London: Social Science Research Council.

- 1988. *The spoken vocabulary of five-year old children*. University of Reading: Reading and Language Information Centre.
- Ratner, N. & Bruner, J. 1978. Games, social exchange and the acquisition of language. *Journal of Child language* 5, 391-401.
- Sanches, M. & Kirshenblatt-Gimblett, B. 1976. Children's traditional speech play and child language. In B. Kirshenblatt-Gimblett (ed.), *Speech play: research and resources for studying linguistic creativity*. Philadelphia: University of Pennsylvania Press, 65-110.
- Snow, C. 1986. Conversations with children. In P. Fletcher & M. Garman (eds.), *Language acquisition* (2nd edn.). Cambridge: Cambridge University Press.
- Sutton-Smith, B. 1976. A developmental structural account of riddles. In B. Kirshenblatt-Gimblett (ed.), *Speech play: research and resources for studying linguistic creativity*. Philadelphia: University of Pennsylvania Press.
- Stanovich, K.E. 1987. Introduction: Children's reading and the development of phonological awareness. *Merrill-Palmer Quarterly* 33 (3), special issue.
- 1991. Changing models of reading and reading acquisition. In L. Rieben & C.A. Perfetti (eds.), *Learning to read: basic research and its implications*. Hillsdale: Erlbaum.
- Weir, R.H. 1962. *Language in the crib*. The Hague: Mouton.
- Wolfenstein, M. 1954. *Children's humor: a psychological analysis*. Glencoe: Free Press.

### Children's books and other materials

- Anderson, L. 1974. *The haganinny*. (Reading 360.) Lexington: Ginn.
- Bevington, J. & Crystal, D. 1975. *Skylarks*. London: Nelson.
- Brandreth, G. 1987. *The joy of lex*. London: Guild Publishing.
- Burnard, D. 1993. *Ernest the heroic lion-tamer*. (Jets series.) London: A & C Black.
- Burningham, J. 1964. *ABC*. London: Cape.
- Carle, E. 1974. *All about Arthur (an absolutely absurd ape)*. New York: Franklin Watts.
- Charlip, R. 1964. *Fortunately*. New York: Parents' Magazine Press.
- Crystal, D. 1991. *Language A to Z*. London: Longman.
- Crystal, D. & Foster, J. 1979-85. *Databank* series. London: Edward Arnold.
- 1991. *Datasearch* series. London: Hodder & Stoughton.
- Dahl, R. 1967. *Charlie and the chocolate factory*. London: Allen & Unwin.
- Foster, J. 1985. *What a lot of nonsense!* London: Robert Royce.
- fuzzbuzz*. Oxford: Oxford University Press.
- Gay Way*. 1985. Basingstoke: Macmillan Education.
- Hanson, J. 1972. *Homonyms*. Minneapolis: Lerner.
- Havenhand, I. & Havenhand, J. 1968. *The car makers*. Loughborough: Wills & Hepworth.
- Hoke, H. 1974. *Jokes, jests and jollies*. (Reading 360.) Lexington: Ginn.
- James, R. & Gregory, R.G. 1966. *Imaginative speech and writing*. London: Nelson.
- Jets*. 1993. London: A & C Black.

- Mount Gravatt Reading Series*. 1977. Sydney: Addison-Wesley.
- Murray, W. 1964. *Ladybird Key Words Reading Scheme*. Loughborough: Ladybird Books.
- O'Donnell, M. & Munro, R. 1949. *The Janet and John Books*. London: Nisbet.
- Offen, H. 1993. *Grubble Trubble*. (Jets series.) London: Black.
- Reading 360*. 1974. Lexington: Ginn.
- Scarry, R. 1973. *Find your ABC's*. London: Collins.
- 1964. *Best word book ever*. London: Hamlyn.
- Scieszka, J. 1989. *The true story of the 3 little pigs*. London: Viking Kestrel.
- Seuss, Dr 1965. *Fox in socks*. New York: Random House.
- Vidler, M. 1974. *Find a story*. Harmondsworth: Penguin Education.
- Wales, K. 1991. *The lights out joke book*. London: Random Century.
- Willis, J. & Ross, T. 1990 *Dr Xargle's book of earth tiggers*. London: Andersen Press; Sydney: Random Century Australia.