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DE SAUSSURE AND LANGUAGE PLAY

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Abstract – Language play appears to be a universal of human language behaviour, but it is not immediately clear what place it has within linguistics. Recreational linguistics or Logology may be a thriving field today, but it appears to have developed independently – i.e. from Surrealist language games, Nonsense literature, Recreational Mathematics and the Oulipo Laboratory – rather than within the domain of modern linguistics as shaped and developed on the basis of De Saussure’s Cours de linguistique générale (1916). Back then, De Saussure was at a loss what to make of language play. Anagrams and other mots sous les mots fascinated him, but his reflections on the subject remained unfinished, and in the orthodoxy of the Cours these and other forms of playful language use were seen as ‘bizarre, haphazard and irrational’, falling well outside the domain of linguistics proper. Today, in contrast, we can see how studying language play not as a marginal aspect but rather as a core property and universal feature of human language behaviour and language evolution, opens up new vistas for our understanding of the processes of ‘structuration, destructuration and restructuration’ (Jakobson & Waugh 1979) that operate in language. In this contribution I will discuss this development from periphery to centre, with particular attention to the study of Nonsense and Humour, revisiting and revising the standard history of 20th century linguistics where necessary.

Key words: De Saussure, History of linguistics, language play, linguistic creativity, recreational linguistics, Nonsense

1. Language play as a universal feature of human linguistic behaviour

1.1. *Introduction* – For the centenary session on De Saussure’s heritage, at the 19th International Congress of Linguists in July 2013 in Geneva, rather than discuss his impact within Dutch linguistics (Salverda 1990), I should like to develop a few points about De Saussure and the phenomenon of language play.

Now, even if in 1916, as a happy coincidence, his *Cours de Linguistique Générale* (CLG) was published right when Dada began, it is not immediately clear what De Saussure’s austere and critical reflections on linguistics as a discipline and on language as our object of inquiry could tell us about humour and language play. Nevertheless, it is De Saussure who provides us with our opening question: “À quel moment, ou en vertu de quelle opération, de quel jeu qui s’établit entre eux, de quelles conditions, ces concepts [sc. dans la langue, RS] formeront-ils le DISCOURS?” (De Saussure 2002: 277). That is the question here: which *jeu*, what kind of game, play or operation, makes it possible for language users to effect the transition from *langue* to *discours*, i.e. from the abstract linguistic system to actual language use in speech?

Keeping this question in mind, what I am going to do here is, first, to take a look at some basic aspects of language play in general. Then, secondly, we will turn back to De Saussure and review the key steps in his intellectual development and reflections on linguistics. Thirdly, I will take a closer look at the role of associations in language, and what De Saussure – amongst others, such as Freud and Schuchardt – has had to say about this. Fourthly, I will summarise the contributions to our understanding of language play from post-saussurean Recreational linguistics and Contact linguistics. My concluding remarks will be concerned with the linguistic study of language play and

the research perspectives developed for this by scholars from Roman Jakobson to Louis-Jean Calvet, Pierre-Yves Oudeyer and others.

1.2. *On language play* - Taking a closer look at language play, we may take our first cue from the immortal hero of Leo Rosten's *The Education of Hyman Kaplan* (1937): a Jewish immigrant in New York learning English in night school, where he gets involved in a class discussion of the question: What is the past tense form of the English verb 'to bite'? Looking for an answer, the whole class rejects 'bited' - since *to bite* is not a regular or weak verb. A member of class then comes up with the correct form, *bit*, and the teacher explains this by analogy: *to bite* goes like *to hide* - *hid* - *hidden*; so it is only logical that we get *bite* - *bit* - *bitten*. At this point, however, Hyman Kaplan chips in. He feels that the past tense of *bite* should not be *bit*, but *bote*. When asked why by the teacher, Kaplan offers his own "dark baffling logic" in matters of language, asking: "Vell,....., if is *write*, *wrote*, *written* so vy isn't *bite*, *bote*, *bitten*?" (Rosten 1970: 111).

And indeed, why not? Kaplan's Yiddish logic, when applied to the English language he is trying to learn, plays a joke on the lack of regularity in the English strong verb 'system', while at the same time subverting the arbitrary 'just because'-logic of his teacher's analogic explanation: there is no real reason why it should be *bit* rather than *bote* - it just happens to be so. So why not adopt Kaplan's analogy rather than the teacher's? Kaplan's *bote* may strike one as obvious nonsense, but it is not totally devoid of sense: it is more like a child's mistake, innocent and slightly off, just following the wrong rule, hence easily corrected. The fun part here is that Kaplan, throughout Rosten's novel, appears to be walking to a slightly different music, and talking to a slightly different logic than the rest of his class; and these would appear to be basic features in all language play.

What we encounter in Kaplan's speech is the production of new and nearly possible variants in English. Language users, while producing their expressions, are evidently capable, at the same time, of playing with them. If someone can produce a linguistic expression, they can usually also produce all kinds of variations on it, creating new forms to satisfy new needs of communication and expression. Linguistic creativity generates variation, and in that variation we language users can find the space and latitude within which to play.

Examples abound. Even on a cursory first view, the domain of language play is not a small field. Thus, one may think of the many irregularities in language - as did Mark Twain, when he said about the strong verbs of German that here we have a language with more exceptions than rules. To others, it is long words that may prove irresistible. The musical *Mary Poppins* (1964) gave the world *Supercalifragilisticexpialidocious*; and for more than 2000 years now the world record has been held by Aristophanes, with a single Greek word of 171 letters in his play *Assembly of Women* (391 BCE). In French, according to his translator Debidour, a similar '*banquet pantagruélique*' would not be possible without a pause, and to solve this problem he came up with the following rendition in two parts: "on va vous servir du *bigornocabillofricandortolangoustabricobouillabopoulaupococovin!* Envoyez le *babaoromsteckopommelettaularfricasséconcasséascassébécassésucrésaléprésaléagogo!*" (Debidour 1962: 78).

Others may be more interested in the play of children's rhymes and the nonsense poetry of Lewis Carroll and Edward Lear; or in Raymond Queneau's *Exercices de style* (1978): ninety nine variations on the same *Ur-text* which, through the playful procedures applied, come out as so many separate and surprising linguistic universes, each in their own characteristic stylistic register. Or one may engage in the play of sounds and letters in *Scrabble*, in word puzzles, in *jeux de mots*, or in anagrams, a favourite pastime in French literary history from Alcofribas Nasier (= François Rabelais, 1532) to Bison Ravi (= Boris Vian, 1943). The domain of language play also includes alphabet magic (Dornseiff 1925) and its attendant taboos and disguises of words and meanings through vowel change, morpho-change, avoidance, euphemism and register change - techniques from ancient cryptography and magical practice, witness Roman graffiti of 2000 years ago, buried upside down and containing curses written backwards, with syllable reversal or in Greek alphabet, all to obscure their true meaning for anyone but a deity in the

netherworld – for if a curse was not expressed in keeping with the very strict rules of ritual, its power might well rebound on the curser him (or her) self (cf. Reuter & Scholz 2004: 70).

1.3. *Investigating language play* (1) - Against this background, what we shall be looking into here is what David Crystal has called varieties of 'almost English', which do have sound, meaning, form, structure etcetera, yet at the same time are nearly, or not quite, or perhaps only in some special way, somehow sort of acceptable. This is what will occupy us here: the forms of playful everyday language activities which almost any language user has in his or her repertoire, and which can throw light on the creative and structuring core principles of our human language faculty – a research theme which, over the last decades, has been tackled from a variety of theoretical perspectives, in functional and generative grammar as well as in the constructionism of Tomasello (2003) and the *combinability*-perspective of Bickerton (2009).

Of particular interest here is the laboratory experiment with nonsense language by Simon Kirby et al. (2008), where participants, with the help of pictures of objects, had to learn a series of randomly constructed nonsense words, which they then had to pass on to a new group or 'generation' of people. The outcome was that within ten 'generations' a new language had come into being, with rules for form, meaning and usage of the elements concerned – rules that were made up and produced through the learning and transmission activities of the successive generations of speakers, who in this way transformed an un-ordered collection of random and intransparent letters, sounds and visual material into a regularly structured language system. It is this ability to *make* language, to make grammar, structure and meaning, which is exactly what Bickerton saw children engage in when growing up in a pidgin and creole speaking environment (cf. Moro 2008: 114-117).

1.4. *Homo ludens* - Play and language play appear to constitute a universal phenomenon, which – as Huizinga noted in his *Homo ludens* (1938) – can be found in all cultures, eras and communities in the world, in all domains of human activity, and with language and poetry as the central field of play. Thus, the ancient Indian *Kāma Sūtra* handbook by Vātsyāyana, from the 4th-6th century CE, but based on texts dating back to the fourth century BCE, contains a long list of language play and games (Vatsyayana 1963: 108-111; cf. Daniélou 1994: 51-56) – not just singing, chanting, mimicry and imitation, but in particular also: play with chain verses and tongue twisters; the study of sentences difficult to pronounce, in which, when repeated quickly, the words are often transposed or badly pronounced; play with the letters, vowels and consonants of a given sentence; the solution of riddles, covert speech, verbal puzzles and enigmatical questions; the use of charms and magic words; changing words and word forms by insertion and transformation; the writing of words in a peculiar way and the art of understanding writing in cypher; puns and changing a letter or accent to change the meaning of a sentence; children's games; teaching parrots and mynah birds to talk; knowledge of languages, of vernacular dialects, of sign language; speaking regional languages and understanding barbarous foreign tongues; or, by inverting syllables, being understood only by the initiated; knowledge of the dictionary and the art of telling stories; versification and literary forms; developing the memory, alternate reciting of texts and the art of completing a quotation after one has heard only a few lines. All these playful language activities – already at that time, two thousand years ago – counted as pleasurable pastimes, on a par with the arts of love, and part of the 64 arts or practices in which a civilized person was expected to acquire competence, skill and expertise.

The above forms of language play, with their seductive potential, fit in well with recent insights from an evolutionary perspective. Play, in particular play with sounds and symbols, would appear to have formed the very first beginnings of human language (cf. Lewis 2009). And this has been continuing ever since, over and over again, forevermore and in every generation anew. Wherever children are talking, they are experimenting with the rules and possibilities available in language, in singsong and tongue twisters, on their own or in interaction with others, such as at jumping rope, skipping or

counting out rhymes (Opie & Opie 1959). In the words of David Crystal's *Language play* (1998: 53): "language play is a common feature of everyday conversation". And this is also the greatest loss when a language dies, as we then lose the ability to play with that language, and to transmit and recreate it through the play forms that serve this purpose in an oral culture – such as story telling, singing verses and responses, mnemotechnic games, riddles and tongue twisters (Harrison 2010: 207; Calvet 1984: 9-25).

As we see: "The significance of play on words (*jeu de mots*) in the life of language should not be underestimated", as Roman Jakobson and Linda R. Waugh put it in *The sound shape of language* (1979: 236). If anywhere, then it is here that we can observe first hand what Wilhelm von Humboldt noted, that language is not an *ergon* ['Werk', product] but *energeia* ['Thätigkeit', activity] (cf. Humboldt (1988: 69 [1836: LVII])).

But what can our modern language theories make of this? And what did De Saussure think of this?

2. 'Montrer au linguiste ce qu'il fait' - Three key moments in De Saussure's reflections on linguistics

2.1. *Mémoire* (1878) – To begin with, there is De Saussure's contribution to the field of historical linguistics in which he made his mark during his lifetime. Like many other leading linguists of the period – such as Verner, Leskien, Pedersen and Brugmann - De Saussure too did have a Sound Law to his name, on distinctive intonations and stress shift in Lithuanian, which he first presented at the International Congress of Orientalists in Geneva in 1894 (Collinge 1985: 149-152; cf. Joseph 2012: 241, 408). While this was an obvious *accolade*, surely his most outstanding and original contribution in historical linguistics is his *Mémoire sur le système primitif des voyelles dans les langues indo-européennes* of 1878, in which, in order to gain a better understanding of the *a*-sound in the Indo-European (IE) languages, he first gave a reconstruction of the original IE phonological system of which that *a* is a part. With the – fundamental - assumption of a system, he created order from chaos and trumped the *Neogrammarians*, since he succeeded in reducing the multiplicity of IE-*Ablaut*-patterns to one single, underlying, abstract system, within which the elementary vowel units with their characteristic properties were strictly ordered relative to each other.

It is possible that De Saussure's *Mémoire* was influenced by the Periodic System of chemical elements (1869) of Mendelejev. In 1875, for a short while, De Saussure had studied chemistry, and in his *Mémoire* we see how in quite similar fashion the IE-vowels are being ordered systematically in a table on the basis of their length and weight (see Joseph 2012: 232). This system underpins De Saussure's prediction of the IE laryngeals - a theoretical prediction which was empirically confirmed in 1927 with the discovery by Kuryłowicz of laryngeals in the Hittite language, which around that time had just been decoded (Benveniste 1966: 32-36; Szemerényi 1990: 127-137, Meyer-Brügger 2003). Within historical linguistics De Saussure thus laid the foundation for what has become known as systematic internal reconstruction (Reichler-Béguelin 2000: 181-182; Mayrhofer 1981; but see Salverda 2001).

2.2. *Cours de Linguistique Générale* (1916) - The second – and by far the best known - milestone in De Saussure's development as a linguist is, of course, his posthumous *Cours de Linguistique Générale* (CLG, 1916), which offered a whole new perspective and focus on the *langue* or language system as the central object of inquiry for linguistics. For the investigation of this new object the *Cours* presented a well-wrought edifice of systematic conceptual distinctions: *signifiant/signifié*, *arbitraire/motivé*, *identité/différence*, *forme/substance*, *synchronie/diachronie*, and *principe linéaire/rapports associatifs*. The central structural principle governing the *mécanisme du langage* is that its constituent units are completely determined and defined by the relations of opposition and difference (in sound as well as in meaning) within the synchronic language system (De Saussure 1972: 167-168; cf. Koerner 1972). The book was left unfinished by De Saussure, but in the version edited and published by his colleagues and students after his death, and translated into many different languages, it certainly laid the foundation for all later branches of structural linguistics (cf. Bouissac 2010).

2.3. *Anagram studies* (1971) - The third key moment came long after his death, with the publication, in 1971, by Jean Starobinski of De Saussure's semiotic explorations dating from around 1900, of anagrams and other *mots sous les mots* which De Saussure saw hidden in ancient epics. Reading Starobinski's book, we encounter a very different De Saussure: not the strict systematic and critical thinker on the intellectual foundations of linguistics, but a much more complex language researcher, who for many years was deeply engaged in the study of anagrams and the *poétique phonisante* (Jakobson & Waugh 1979: 220) in Latin, Greek and Vedic verse structures, the investigation of the glossolalia of the Genevan medium Hélène Smith and her broken Sanskrit or the language of Mars, which she spoke during her séances if the spirit carried her away (Engels 2008) – and on which De Saussure wrote learned commentaries in the monograph *From India to the Planet of Mars* (1900) by his Geneva relative and colleague, the psychologist Théodore Flournoy. This new and rather unknown De Saussure came out of a 19th-century tradition in linguistics which was actually a lot more eccentric, much freer and more inspirational than is generally realised today (cf. Yaguello 1984). This third De Saussure continues to engage our attention, witness the flow of new publications and text editions since the early nineties by Simon Bouquet and others, as well as the recent biographies of De Saussure by Mejía Quijano (2008, 2012) and Joseph (2012), and the new analyses of his anagram studies by Bravo (2011) and Heller-Roazen (2013).

An issue of particular interest here is the scientific status of De Saussure's anagram analyses. Note, for example, how Jonathan Swift in his *Gulliver's travels* (1726) satirised the Britons in the kingdom of Tribnia over their mania for anagrams. In that kingdom there were always conspirators at work, and in order to catch them, people often used the anagrammatic method. If, for example, a suspect had written in a letter '*Our brother Tom has just got the piles*', then, with the help of this method, a skilled decoder could find out that with the same letters one could also produce the sentence, '*Resist – a plot is brought home – The tour*'. And so another plotter was caught (cf. Crystal 1996: 71). But if we accept this, then any given language utterance can really mean anything. Whereas, in his anagram investigations, what most interested De Saussure was to find procedures, rules and basic concepts for the decipherment, decoding and interpretation of language signs in texts, of the codes and conventions governing them, and of the hidden messages that might be contained in those texts. It is as if he was searching for a logic or a methodology of decipherment – following in the footsteps of that other great discovery of the 19th century, the decipherment of unknown scripts and languages (see Robinson 2008), about which, by and large, we read far too little in the standard histories of linguistics.

2.4. "*Montrer au linguiste ce qu'il fait*" (De Mauro 1972: 355) - The red line running through these three key moments – milestones, really – in De Saussure's intellectual development as a linguist, is his systematic, critical-epistemological perspective, which eventually led him to define as one of the three core tasks for the discipline of linguistics '*... de se délimiter et de se définir elle-même*' – viz. that it should define and delimit itself (Saussure 1972: 20, 362). For De Saussure, such critical epistemological scrutiny was part and parcel of his scholarly endeavour *within* linguistics (Salverda 1985: 20; Bouquet 2003: 12). It is this epistemological interest that drove him to demonstrate to his fellow linguists, whether they were doing structural analysis, studying language use, engaged in historical reconstruction or in semantic exploration, what exactly it was they were doing, and to clarify how – i.e. with what linguistic terms, notions, distinctions and techniques – they should be tackling the issues before them.

It is through this continuous critical scrutiny of linguistics as a discipline that he became the founder not only of systematic reconstruction in historical linguistics, but also of structuralism in synchronic linguistics, and eventually also of poststructuralist linguistics and semiotics.

3. Going beyond structuralism: the '*rappports associatifs*' and other dimensions of language play

3.1. *Freud on spoonerism* - In 1901 Sigmund Freud published his *Zur Psychopathologie des Alltagslebens* [=

The psychopathology of everyday life] with its collection of data and materials for psychological research into meanings and messages that were hidden in language phenomena such as speech errors and slips of the tongue. This was followed in 1905 by his *Der Witz und seine Beziehung zum Unbewussten* [= *Jokes and their Relation to the Unconscious*], which contains a wide range of examples of humour in language, such as the fusion or contamination in *Anecdote* (De Quincey – from Anecdote + dotage) and *Millionarr* (Heine – from Millionär + Narr); and puns and witticisms such as *tête-à-bête* (cf. *tête-à-tête*) or *Traduttore – traditore* (translator-traitor). Freud's *Psychopathology* discusses mispronunciations such as *Geiz* (greed) instead of *Geist* (wit), and *nach Hose* (to trousers) instead of *nach Hause* (home), as well as spoonerisms such as *durch die Ase natmen* instead of *durch die Nase atmen* (breathing through the nose).

This last example, from one of Freud's patients, comes with a range of associations, memories and reflections on how she happened to commit this speech error. As she told Freud, that morning, while waiting for the tram in the *Hasenauer strasse*, she had been thinking that if she were French she would have said *Asenauer strasse*, "as the French always drop their aitches at the beginning of a word". This is followed by a further series of reminiscences about French people she had known, and about the short play *Kurmärker und Picarde* in which as a fourteen-year-old she had played the part of Picarde, which had her speaking broken German – reminiscences that had been triggered by the chance arrival of a French guest in her boarding house. So, in Freud's view, the interchanging of the sounds in *durch die Ase natmen* was "the result of a disturbance by an unconscious thought from an entirely different context" (Freud 1901 [2001a: 63], but see Levelt 2013: 161-163).

3.2. *De Saussure on associations* - What Freud had to say about the memories and associations that make up the mechanism underlying this slip of the tongue ties in seamlessly with what De Saussure says in part 2 chapter 5 of his *Cours de Linguistique Générale* concerning the word *enseignement* and the *rappports associatifs* between this particular word and others which somehow have something in common with it, such as *enseigner, enseignons, renseigner, enfant, armement* or *éducation*. As De Saussure put it: "Any word can evoke in the mind whatever is capable of being associated with it in some way or other", and: "it is impossible to say in advance how many words the memory will suggest, or in what order. Any given term acts as the centre of a constellation, from which connected terms radiate *ad infinitum*" (De Saussure 1972: 174-175 [= Harris 1983: 124-125]).

In other words: in the immense word web that is a language, any word can, in principle, entertain the most diverse kinds of relations with other words: relations of a logical or a mathematical nature, or to do with regular sound change, but also musical relations, alphabetical, grammatical, historical, semantic or social-pragmatic relations, morphological, idiomatic, phonological, presuppositional, political/ideological, emotional or performative relations, etcetera. And, as De Saussure put it, there is no upper limit to the number nor a particular order to the total collection of such relations. That is to say: each and every word of a particular language can be involved in any kind of associative relationship to any other word, even to words from totally different languages, and the total collection of associations is in principle undetermined and unlimited. As De Saussure adds: "It is this faculty [sc. of association and coordination, RS] which plays the major role in the organisation of the language as a system" (De Saussure 1972: 29 [= Harris 1983: 13]). That is to say: where associations are involved, *anything goes*. And this, emphatically, as a central mechanism within the *langue*.

On this reasoning, one would almost expect De Saussure to go on and say something about the role of associations in language play, but no. He does not have much to say about language play in the sense of section 1.2 above. His *Cours* contains just one single remark concerning *jeu de mots* (De Saussure 1972: 60), made in the context of a discussion of loan words, puns, witticisms and mental leaps from one idea to the next. But these are all mentioned in passing only, as examples of frequent if rather marginal irrationalities in language, and no link is made with the discussion of the *rappports associatifs*.

There is an unresolved tension here in De Saussure's conceptual framework, between on the one hand the chaos, or at least indeterminacy and lack of order, of the *rappports associatifs* and on the other

hand his central thesis that the identity of the language sign is completely defined and determined by its relations of opposition and difference within the synchronic language system. In the further development of structural linguistics, this matter has been glossed over by streamlining and reducing the *rappports associatifs* to just the vertical axis of paradigmatic relations (Barthes 1964: 115), but in fact there is a crucial problem here, since from De Saussure's position it follows – as Roy Harris (1987: 234) has noted – that when it comes to individual words, there now no longer is a clear dividing line between *langue* and *parole*. So, if language is a system at all, then at least – after the admission of the *rappports associatifs* – it is not a system that keeps to the central principle of linguistic structure put forward in the *Cours*, according to which the *langue* is a well-defined system of purely differential sign units. De Saussure himself did recognise this too, and addressed it by claiming that in the dynamics of language evolution, next to the regular operation of sound laws and analogy, there is the equally significant impact of what he called the 'bizarre, haphazard and irrational' driving forces of misunderstanding and illogical folk etymologies, as, for example, in the nonsensical association of *Abenteuer* with *Abend* in German (De Saussure 1972: 239).

3.3 *Thinking away from la langue?* - The true significance, however, of De Saussure's remarks about associations quoted above is that they suggest a rather different notion of the *langue*, far less rigid, formal and structured, rather more as an entity that has broad, system-like properties, and that in its core may be reasonably strictly defined and organised, but that pretty quickly – through the *rappports associatifs*, through the impact of the *parole* and through diachronic restructuring – diverts into something completely different, a complex domain full of the most diverse kinds of contingencies, non-formal fuzziness and the incidental, context-related effects of language contact, corruption, bizarre folk etymologies and the many ways we humans have to disguise our messages. What he says about associations would seem to open up the strictly formal notion of the *langue* as defined by the *Cours* for all those kinds of elements that for De Saussure made up the great charm and attraction of language, what he called the *côté pittoresque* (De Mauro 1972: 355) – which fascinated him, but which he regarded as marginal and peripheral and was, in the end, unable to come to grips with as a linguist.

Much the same can be said about his anagram studies. Here it was the play of phonic associations that fascinated him. Anagrams, in De Saussure's view – as Bravo (2011) and Heller-Roazen (2013) have demonstrated – thrive on an unspoken background text of *mots sous les mots* and their resonances. But clearly, for the further investigation of these anaphonic resonances the leading conceptual model can hardly be the chess analogy so well-known from the *Cours*, with its clear-cut and well-defined rules, pieces, moves and positions (De Saussure 1972: 125 [= Harris 1983: 87-88]). Instead, a quite different key would seem to be needed here, as the anagram texts he studied are rather more like a verbal tapestry threaded with sonic gold dust – the study of which would require the investigating linguist to have a creative ear, "*une écoute créative*", as Bravo (2011: 260) put it. Fascinating in its perceptiveness and tenacity, in the end however, De Saussure's pursuit of the anagrammatic, and his creative hearing underpinning it, failed to meet the exacting standards of scientific scrutiny which he demanded for the discipline of linguistics. So he abandoned the investigation, leaving the issues unresolved.

3.4. *Schuchardt's perspective: the contribution from Contact linguistics* – At this point, it is important to note how De Saussure's contemporary, Hugo Schuchardt, a specialist in romance and creole languages and language contact studies, took a very different view. In Schuchardt's view, language was not an organism, as Schleicher thought; nor was it an austere edifice of exceptionless sound laws, as the *Junggrammatiker* maintained; nor a system completely defined by its internal relational structure, as posited by De Saussure; but on the contrary: a human activity, grown and produced by history, and in every respect dependent on the speaking subject (Spitzer 1922: 150).

Schuchardt – though strangely missing from Koerner and Asher's *Concise History of the Language Sciences* (1995) – was a pioneer in many respects, a pivotal figure in the history of modern linguistics (Oksaar 1996), whose incisive critique both of the *Junggrammatiker* and of De Saussure's *Cours*

(Schuchardt 1885, 1917) must serve as a reminder that there has always been - and will always need to be - a critical counterpoint to mainstream orthodoxies in linguistics (cf. Salverda 1990, 2001). Following on from Whitney (1881 [1971]), Schuchardt inspired an important tradition of Central European multilingual scholarship in linguistics, in the pre-war Prague Linguistics Circle of Mathesius, Karcevski, Polivanov, Trubetzkoy, Jakobson and Bühler - a tradition which continued after the war in the work of Weinreich (1953), Hymes (1964) and Martinet (1968), and on to Goebel et al. (1996) and Matras (2009).

In their work on the problems and processes of language contact, these scholars developed a research perspective for linguistics that goes far beyond what De Saussure's *Cours* had to offer. In language contact situations, speakers of different languages somehow will have to make do, and in such situations basically anything can happen. As Larry Trask (2000: 183) put it: "The effects of contact may range from the trivial to the overwhelming, and may involve vocabulary, phonology, morphology, syntax or just about anything else". Already within a single language, speakers from different areas, social background or generations may easily mishear and misunderstand each other, and this in turn may become a source of fun - as when Opie & Opie (1959: 173), in their wideranging collection of nick names for school subjects, relate how Lewis Carroll transformed the well-known subjects of Reading, Writing, History and Geography into the nonsense curriculum of the Mock Turtle: '*Reeling and Writhing, Mystery, ancient and modern, with Seaography*'. All the more so do we encounter such processes and their effects in contact and interaction between speakers of different languages.

Here we touch on a crucial question, which may have been overlooked in the experiment by Kirby et al (2008) which we mentioned above, viz. What was the mother tongue of the test participants, and how was their nonsense input affected by this filter? In fact, however, this is a very important subjective factor in interlinguistic contact, as we know from the work of the Prague School linguist Polivanov (1931 [1974]): Dutch *matroos* (sailor) is heard and pronounced by Japanese native speakers as *madorosu*; similarly, during the London Olympics in August 2012, the Dutch cyclist *Koedoeder* [Kúdode] was consistently announced on BBC as *Kedúdah*. Such everyday processes of mishearing and mispronunciation may give rise to multilingual humour, as in the recent Parisian poster slogan '*Ne me tweete pas*'; or when Edward Lear's *pussycat* was rendered in French as *poussiquette*; or in the loan transformation of French *divertissement* into *fedivedaasje* in Frisian.

As we can see, the domain of language contact, especially where it generates what Crystal calls 'fractured English', is 'a major source of comic examples' (Crystal 1998: 134). Polivanov would have been delighted at the many words from eastern languages which during the colonial era have been mangled by the parroting tongue of British sailors and soldiers, as documented in the *Hobson-Jobson* dictionary of Anglo-Indian slang, such as for example *goddess* as a term for the young women of the land, which is "an absurd corruption" for Malay *gadis*, a virgin (Yule & Burnell 1886 [1996]: 381). Corruption and deformation of language have a major role here, and the comic effect may well be deliberate: language play for caricature, parody and other subversive purposes has a long, popular tradition, for example in the upside down world of Carnival, with its inverted rituals, its sermons for Bacchus and wine, and its mock masses in fake Latin, garbled with made up voices, phonic ornamentation and the singing of scandalous songs. Language contact and its attendant mishearing, misunderstanding and mispronunciation is not a neutral process, but a form of human interaction which opens up all kinds of possibilities for imitative play and mocking mimicry.

3.5. *Investigating language play* (2) - In the various cases we have seen so far - whether it is Hyman Kaplan's baffling logic, Freud's lady's French-induced German spoonerism, Lewis Carroll's nonsense curriculum, Bickerton's creole speaking children, or the garbled borrowings in *Hobson-Jobson* - we are looking at contact processes through which words may become completely detached from their original form, meaning, structure and usage. Here, with their discovery in language contact of processes of deformation, creative misunderstanding and linguistic innovation, scholars in the new field of contact linguistics succeeded in going well beyond the few remarks about associations and silly folk etymologies

in De Saussure's *Cours*, capturing a pervasive phenomenon in the operation of language, which is also a powerful driving force in language play.

4. De Saussure, Recreational linguistics, and Language Play

4.1. *Language as a game of chess* - When we now return to our opening theme - i.e. De Saussure's central question as to what kind of game or operation language really is - the answer which he seems to have liked best was the comparison in the *Cours* of language to a game of chess. With this analogy, the *Cours* firmly adopted the model of a rule-governed game as the nearest analogy for human language. A similar games analogy is given by the philosopher Ludwig Wittgenstein when he discusses language (cf. Harris 1988). Put briefly, their core insight is: "A game of chess is like an artificial form of what languages present in a natural form" (Greenberg 1971: 332), and over the past century this *point de vue* has had a clear heuristic value for the study of language - but with a crucial proviso, viz. that "language is more like a game in which we are trying to deduce the rules by watching the games. Hence, the more of the game we see and the more different games we see, the better off we are." (Greenberg 1971: 344).

However, it is one thing to see our object of inquiry, language, as a chess game. But at the same time, however productive the chess analogy has been in the further development of De Saussure's critical reflections and conceptual framework, it is quite another thing to investigate the actual, everyday workings of language at play. This latter phenomenon, as we saw above, never merited more than De Saussure's marginal attention. Moreover, in his conceptual framework, linguistic analysis - as in a chess game - was limited to the two axes of linearity and association, and this did not enable him to come to grips with language play - which is not like a chess game, and may involve totally different forces in its production: unspoken resonances, creative misunderstanding, a different logic, or even a different music altogether.

4.2. *De Saussure's cod Latin* - However, what De Saussure could not handle in his theory, he very well managed to do in practice. In the autumn of 1899, in an attempt to demonstrate to his learned colleague Flournoy how broken the Sanskrit spoken by Hélène Smith, or Simandini as she called herself, really was, De Saussure made up a piece in cod Latin, "*Meâte domina mea sorôre forinda inde deo inde sîni godio deo primo nomine ...obera mine.. loca suave tibi ofisio et ogario... et olo romano sua dinata perano die nono colo desimo... ridere pavêre.... nove ...*" - in a Latin that is very basic and reduced, to the point of not actually being Latin; yet at the same time this 'almost Latin' was "not presenting anything contrary to Latin" (Joseph 2012: 434-435). As Gadet (1987: 116) commented: "Voilà notre austère savant occupé à fabriquer du Latin de cuisine!"

At the time, such use of Latin for scholarly humour was customary in learned circles all around Europe, as we can see in the foreword of the *Hobson-Jobson* dictionary, which lists "hybrids and corruptions of English fully accepted and adopted as Hindustani by the natives", such as "... *jail-khāna, bottle-khāna, buggy-khāna*, 'et omne quod exit in' *khāna*, including *gymkhāna* ..." (Yule & Burnell 1886 [1996]: xxi). Similarly, in their entry for 'poggle' (< *pagal* = fool, madman) we find Hindi and Latin conflated into a joking macaronic adage: '*Pagal et pecunia jaldé separantur*' (= A fool and his money are soon parted; cf. Rushdie 1991: 82).

For De Saussure, this was as far as he was able to go in the field of language play. That is, he could actually play with languages himself; but in his conceptual framework there was no place for it, and so language play was defined as belonging to the '*secondary uses* of language' (cf. Guiraud 1968) and left to the irrational quirks of *parole* and diachrony.

This situation and the division of labour it entails has not much changed since Hymes observed that, on the whole, studies of speech play and verbal art "have been lacking" in American linguistics and anthropology; and that they "have come to attention mainly by obtruding upon the ordinary course of linguistic and ethnographic analysis and through the collection and analysis of texts" (Hymes (ed.) 1964: 291). Thus, even though language play is an extremely fascinating aspect of human language, the investigation of it was largely left outside the domain of linguistics proper, to psycholinguists (Levelt

1989), child specialists (Kirschenblatt-Gimblett 1976, Crystal 1998) as well as anthropologists and folklorists (Sherzer 2002), rather than theoretical linguists such as Chomsky or Pinker.

4.3. *Recreational linguistics* - It was left to others, not linguists but lovers of language and practitioners of verbal art, to further develop this theme - *terra incognita* for De Saussure - into a new and separate field of inquiry. All through the twentieth century we have come to learn more and more about how human beings play in and with language - thanks in no small measure to Raymond Roussel and André Jarry (cf. Hugill 2013); to the fantastic language games of André Breton and other Surrealists (Brotchie 1995); to the linguistic experiments of the Oulipo laboratory for potential literature of Raymond Queneau and George Perec in France (Mathews & Brotchie (eds.) 2005); to the Recreational Mathematics and the Lewis Carroll-studies of Martin Gardner; to the Logology of A. Ross Eckler, Willard Espy and Douglas Hofstadter in the United States; Tony Augarde, Gyles Brandreth, David Crystal and Ben Macintyre in Great Britain; Battus, Dr. Verschuyt and Rudy Kousbroek in the Netherlands; Stefano Bartezzaghi, Giuseppe Varaldo, Paolo Albani and Berlingierro Buonarotti in Italy; and very many others.

Also, today, on the internet, we find a large and ever growing collection of language games. The Oxford Dictionaries website offers online access not just to their own Oxford Crossword Solver, but also to a large variety of interactive word games, such as Lingo, Flummoxed or Scrabble. And there is an extensive literature today of research and studies on language play and its role in children's language development and socialization; in the acquisition of literacy; in didactics and creative learning; in literature, newspaper headings and advertising; in conversation, oral culture and humour research; in language contact, bilingualism and language acquisition; and also in imaginative cognitive science.

4.4. *Investigating language play* (3) - So the question arises: How do we deal with this within linguistics? Here, pride of place must go to Marina Yaguello's *Alice au pays du langage* (1981), in which, following Roman Jakobson and the Prague School, she presented an approach to linguistics which from the outset is informed by language play and the work of recreational linguists, from Lewis Carroll to the Oulipo group. Also, in the 10-volume *Encyclopedia of Language and Linguistics* (Asher et al (eds.) 1994), there is a lot of sound basic information on allusions, games, glossolalia, humour, homophones, puns, secret languages, slips of the tongue, speech errors, spoonerisms and taboo. Taking this further, David Crystal, calling attention to the badly neglected 'ludic nature of language itself' and the need for 'a ludic linguistic perspective' (Crystal 1998: 1-8, 218-225), has delved deeply into language play in literature and cabaret, in language learning, in language contact, in everyday conversation, and in language itself. Going far beyond what De Saussure could have imagined, and doing what Greenberg called for, these seminal contributions have put the focus of linguistic inquiry squarely on everyday rule breaking, on experimenting with sounds, intonation, stress, rhymes and rhythms, on strategies for manipulating language structures, and on the production of nonsense and 'almost-English'.

In language play there are rules to be followed, yet at the same time those rules are being played with as well. Exploring possibilities that lie dormant, the domain of language play is full of all kinds of fun and pleasure: playing with sounds, letters, forms, words, meanings and sentences; playing with rules, patterns and features; with conventions, boundaries and taboo - and also the outcome of this linguistic creativity: the production of riddles and allusions, malapropisms and other speech errors, alphabet magic, anagrams and parodies, jokes, puns, nicknames and invective, strong language and insults, automatic writing and cryptic games.

Looking into these varieties of language play, it is not just Hyman Kaplan's *bite, bote, bitten* that may be of interest. The output of recreational linguistics and of the many expert Logologists of the past century provide us linguists with a veritable goldmine of interesting and exciting experimental data and challenging insights for the further investigation of language play and linguistic creativity as core aspects of human cognitive potential - as witness in particular the following three subthemes and domains.

4.4.1. *Inventing new languages* - A first important subdomain of language play is the invention of new

languages. As Marina Yaguello (1984) has shown, there exists a long tradition of activity in this field. Think, for example, of the 14 languages designed and developed by J.R.R. Tolkien for the peoples of Middle Earth (Noel 1980). Or consider *Lincos* (< *Lingua Cosmica*), invented in 1960 by the Dutch mathematician Hans Freudenthal for contact and communication with extra-terrestrial aliens who were expected to learn, step by step, through signals based on logic and radio frequencies, what sort of thing language really is, and how it works. There has been significant growth in this domain: while Yaguello (1984) mentioned some 400 different invented languages, Albani & Buonarotti (2001) already have more than a thousand such languages in their dictionary. This in itself is a mark of how deeply this creating and structuring ability is anchored within our linguistic faculty. Making new languages is not a slightly eccentric pastime, indulged in by Tolkien; but on the contrary, as shown by Kirby et al. it forms an integral part of our human language faculty, and can tell us a lot about its workings.

4.4.2. *Glossolalia and schizophonetics* – Secondly, as we learn from Williams (1981), glossolalia, speaking in tongues or singing with the spirit by Pentecostal preachers may result in multilingual chants and prayers in languages not known previously by the people involved. Such xenoglossia often occurs in crosscultural contexts, as was the case with Flournoy’s Hungarian-born medium Hélène Smith in Geneva. De Saussure was fascinated by this, but as he put it, her Sanskrit wasn’t really Sanskrit; and according to Williams (and Flournoy) her ‘Martian’ actually was ‘disguised French’. In the production of pseudo-words spoken in glossolalic trance, all kinds of speech permutations and poetic devices may be at play, with vowel and consonant changes of a sometimes very complicated nature, frequent alliteration and rhyme, protraction and repetition of vowels, peculiar stress and intonation patterns, sing-song rhythms and melody, etcetera (Williams 1981: 169 eqs). Similar phenomena in the Schizophonetics of Louis Wolfson (1970) have been compared to the transformative procedures of Raymond Roussel. In the *Dossier Wolfson* (Pontalis et al. 2009) there is a chapter from Pierre Alferi’s novel *Le Cinéma des familles* (1999), about Flore and her counting out rhymes, riddles and hymns, with mantra-like proverbs such as *derobim, derobam, derobadirobam*, and assonant transpositions through which *Babediboup shebaberibop* is rendered in French as *Par petits bouts, je bois mes dis bocks* – a transformation that is not really very different from what Lewis Carroll in his day was doing to the curriculum (section 3.4 above).

What we see here, in very special circumstances of speech production, is languages interacting with each other, within one mind and one mouth. Yet, the transformative techniques in operation here do not appear to be very different from those encountered in language play or everyday language behaviour. Unusual as the outcomes sometimes are, they fall well within the operation of our language faculty.

4.4.3. *Taking aim at the ineffable, in song, in mantras, and in nonsense poetry* - In this third subdomain, one of the most popular Christmas carrols of Britain, the medieval ‘*In dulce júbilo/Nun singet und seid froh*’, is a bilingual song which each time opens with a verse in Latin, then follows on with a rhyming verse in German – thus building a macaronic versicle and response in two languages that are foreign to both the British tongue and the British ear. It is the antiphonal assonance of Latin and German which here creates not an abracadabra but an almost angelic resonance from on high, turning this carroll into a merry *magnificat* with a music that continues far beyond the words and sings out the joyous coming into the world of the Christmas child.

Mantras too can achieve such a language-transcending effect. In the case of ancient Sanskrit mantras this has been ascribed to the fact that they share significant features with other “fringe linguistic phenomena – like the recitation of prayers, the chanting of magical spells, or the ecstatic experience of speaking in tongues” (Thompson 1997: 589). Here, notably, the philosopher Frits Staal has gone much further, claiming that mantras are “pre-linguistic, akin to music, and in structure more similar to the syntax of bird-song than to the syntax of human language” (Staal 1989: 279).

Something similar may occur in nonsense poetry. As Elizabeth Sewell has observed, Nonsense

poetry is to the English what Symbolist poetry is to the French. Or, more precisely, as she put it: Lewis Carroll "is.... a central figure, as important for England, and in the same way, as Mallarmé is for France. Nonsense is how the English chose to take their Pure Poetry, their *langage mathématique* or *romances sans paroles*: their struggle to convert language into symbolic logic or music." (Sewell 1974: 155). As she points out, nonsense "produces by re-patterning of letters in a word or of objects in a seemingly given universe, a dis-location of that given and then a re-location which, slight as it is, may yet permit glimpses of just such other orders beyond and through our usual perspectives. Nonsense may give delight in proportion as it makes possible such glimpses" (Sewell 1980: 41, in: Tigges 1988: 257-258).

The salient link within this third subdomain of language play – between jubilant resonances in a Christmas carroll, language-transcending mantras that are like bird-song, and glimpses of another world than this in the *poésie pure* of Nonsense – appears to be that the words involved are used here in order to go beyond them and achieve the desired musical, mystical, magical, ecstatic or other postverbal effects.

4.5. *Experimenting with the potentialities of language* - The various kinds of language data discussed above effectively constitute a poststructuralist widening of linguistic research to include an investigation of word games and language play in all its inexhaustible variety and diversity. Now- whether it is De Saussure's *Latin de cuisine*; the manifold productions of recreational linguists the world over; the invention of new languages; the extremes of glossolalia and schizophonetics; or the language-transcending impact of nonsense, verbal magic and mantras – all these forms of language play demonstrate how, and in how many ways, human beings can always go on experimenting with the potentialities of language, playing with the language system and its many subsystems of sounds, letters, forms, meaning, syntax, words, register and context, each with its own characteristic set of rules, principles, patterns and structures. In language play we see how rules and conventions can be negated or subverted; and how asymmetries, incongruities and accidental holes in the system may be exploited to great effect. And while we play, we are continually jumping back and forth from one level or subsystem of language to the next, often taking a shortcut through a range of subsystems at once – and thus, time and time again, we succeed in putting an infinity of new and unexpected associations into words.

5. Investigating Language Play: New Vistas

5.1. *Language play not marginal but central* – On account of the preceding discussion we must consider that – like metaphor – so too, language play, and the ways in which language is used in such play, can tell us a lot not only about the organisation of the language system, but also about the production and interpretation of language by human beings.

Language play, as we have seen, is pervasively present in languages everywhere around the world; it has been attested for thousands of years, witness the *Kāma Sūtra*; it has taken centre stage in the course of the last century, especially in recreational linguistics; it is operative in each and every speaker individually; and with its virus-like qualities (cf. Salverda 1998) it would appear to be the very mechanism of transmission and innovation, hence ultimately also of adaptation and survival of language and languages. Language play, in other words, is not a marginal or secondary aspect, but on the contrary, an absolutely vital, central and universal feature of language, which – to put this in Saussurean terms, even

if he himself could never have imagined this - through the *rappports associatifs* is anchored right in the heart not just of the *langue* but also of the *parole*, the *synchronie*, the *diachronie*, the relational infrastructure of the language system as well as our language faculty.

So, if we want to make further progress here, on our way to a theory of linguistic creativity, at the very least we shall have to explore and investigate many more of the curious and intriguing insights and data available from recreational linguistics.

5.2. *Going beyond De Saussure* - In his essay *Le jeu du signe* (2010) Louis-Jean Calvet has done just that, offering an in-depth discussion of everyday language phenomena ranging from speech errors and mispronunciations, through tongue twisters, *jeux de mots*, rhymes and ambiguities in poetry and *chanson*,

to mental leaps, metaphors and folk etymologies. Thus, he has demonstrated that the strict structuralist conception of the linguistic sign in De Saussure's *Cours* as a simple, linear, two-sided, symmetric parallel structure, a formally defined and determined object, is no longer tenable. We will need a much wider, far more indeterminate, more flexible, asymmetric, dialectic, complex and dynamic sign-concept, if we really want to do justice to the intricacies of the language phenomena in question. This view of the dissociability of the language sign had been posited before, notably by Karcevski in his discussion of the asymmetric dualism of the linguistic sign (cf. Karcevski 1929), and it is good to see this taken up once again and being fleshed out within linguistics today.

For the further investigation of language play from this post-saussurean and poststructuralist perspective, a clear and stimulating framework is available in the work of Roman Jakobson. Already in the 1940s Jakobson had linked the two fields of early child language development and the pathology of language loss in aphasia with the unifying theoretical search for universals of language. Later on, in the 1960s and 1970s, he expanded this central quest to also include research in the fields of language function, poetics and metaphor. And finally, in *The sound shape of language* (1979), written together with Linda Waugh, Jakobson reacted to De Saussure's anagram studies by calling for an 'inquiry into the structuration, restructuring and deconstruction of language' (Jakobson & Waugh 1979: 237).

Language play has a central place here. On the construction side we note, in the contribution by Kirby et al. (2008), how structure and meaning are made, by ordinary language users who know how to turn nonsense material into coherent and regular language use. Conversely, on the deconstruction side, we learn from games such as *Chinese whispers* or *téléphone arabe*, how human beings can turn an utterance with a clear and well-defined form and meaning into something completely different. In that passing-on game, words are mangled through misperception, misunderstanding and incomprehension; and well-structured, understandable messages can thus be garbled into something utterly incomprehensible, with a concomitant loss of structure and meaning.

What we have learned thus far is that, in language play, when there are no rules, language users generally are quite capable of making them; and when we do have rules, then language users can often change or remake, subvert and even unmake them. Since language play can thus create order from chaos, but just as well chaos from order, it must be seen as an absolutely central force in the dynamics of language.

5.3. *Mechanisms of language play* - So the question arises: What mechanisms are the driving force in these (de-/re-) structuration processes of language play? In the psycholinguistic model of Levelt's *Speaking* (1989) - and again in his recent *A History of Psycholinguistics: The Pre-Chomskyan Era* (2013) - we can find a lot on speech errors, slips of the tongue, mistakes, malapropisms, taboo words, tongue twisters, punning, rhyme and rhythm. Similarly, Verkuyl (2013) points to the significance of word puzzles for grammarians, because of the elementary mathematical operations involved, such as permutation, deletion, addition, substitution, reversal, merging and separation. As Goatly (2012) adds, language play also involves semantic/pragmatic principles of lexical priming, incongruity, markedness, relevance and (dis-) ambiguity.

What we learn here is that the same mechanisms - of misperception and mispronunciation, of error, creative misunderstanding and innovation, of meaning and (pseudo-)logic - which one can also observe in everyday conversation and 'ordinary' language use, are at work in language play. Here then, we have, it would seem to me, an answer to De Saussure's opening question (see section 1.1): it is language play through which human beings turn the abstract units of the *langue* into actual speech in *discours*.

That is: nonsense is perhaps best seen as just another 'lect' of the language(s) under investigation. Often, the playful expressions produced may just involve a tiny little difference or similarity, but, as we saw earlier, language play can also have techniques and structural features in common with extremes of speech deformation in glossolalia and schizophonetics, in mantras and nonsense. Here, it is the mechanisms from everyday language use which serve to make recognisable what in these extreme forms of language play is the relevant association, sonic or otherwise, that may be involved, even if only fleetingly and at the very back of our minds. For that is part of the fun: the sudden glimpse or recognition of something unexpectedly salient in the great play of difference and sameness within language.

As for the rules of language play, Battus in his *Opperlans!* (2004) has formulated a number of relevant linguistic laws (and pseudo-laws) for language play. His central principle is that *anything goes* - which,

as we have seen, was also the position De Saussure held on associations, and which Larry Trask took on language contact. What we have here are three neo-anomalists, *bien étonnés de se trouver ensemble*, who know that our brain, after all, is programmed so that everywhere it searches and finds rules and makes systems, while in actual fact human language behaviour does not really stick to those rules when it is producing language and language play in the most immense and unbounded variety and superabundance, with the most unexpected exceptions to every rule, and behind every exception the most amazing tangle of rules. Which goes to show that Bourdieu was right when he said that understanding, when it happens, is actually a marginal case of incomprehension (Calvet 2010: 23).

5.4. *Into the laboratory* - Where do we go from here, and how? Humour identification may still remain one of the most difficult, complex and elusive problems in the field of natural language understanding (Goatly 2012), but given that playfulness appears to be such a fundamental feature of human language use and everyday conversation, our aim in studying language play should be to find out more about the central mechanisms of linguistic creativity. To this end, it makes good sense to investigate many more of the curious and intriguing insights and data available from recreational linguistics, in order to elucidate the principles and mechanisms involved, and to move from there, step by step, towards an integrated working model of linguistic creativity.

Here, an interesting way forward is offered by the experimental laboratory approach of researchers such as Kirby et al. (2008). Historically, this was also the route taken by the Oulipo Laboratory in France and by many other Logologists. Of particular interest for further research are the experiments of Pierre-Yves Oudeyer (2009), who aims to socialise robots by giving them language. His experiments are designed to replicate with robots how – i.e. through what actions and interactions – humans learn, develop and construct language and languages. Just as Kirby gave his human test participants all kinds of nonsense material, in order to find out how they would handle this in acquisition and transmission, so Oudeyer gives his robots the opportunity to play with each other and to develop and construct through interaction a range of components necessary for language use, such as names for objects, representations, agreements, conventions, and eventually also grammars and rule systems for language use.

Interestingly, his robots are fitted with a neural architecture of a very basic nature – no more, really, than the capacity to learn to imitate sounds, or what he calls ‘adaptive vocal imitation’ (Oudeyer 2009: 109) – and it is on this basis that they succeed in developing the basic components of language. By exploring what his robots can do with vocal mimicry – a mechanism which can be found also in songbirds like the common starling (Hausberger 2009) – Oudeyer has explicitly linked his laboratory experiments to scenario’s for the evolution of human language, in which verbal mimicry has a central role to play (Oudeyer 2009: 109-112; cf. Jarvis 2013).

Here we really are moving into the future. Abandoning the traditional marginalisation of language play in core theoretical linguistics at least since the time of De Saussure, and going well beyond the inbuilt limitations of his conceptual framework, we can now envisage a full investigation of the language play of humans, who, in the course of evolution, have retained and developed their basic ability of vocal mimicry, or ‘adaptive vocal imitation’. This ability – which humans share with songbirds, and before long will share with robots – is a major component of language play; metaphor is another one; and it is because of such basic mechanisms that language play is a key driver in the dynamics and evolution of language.

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