The Serbian-born poet Charles Simic recalled his first experiences as a non-English speaker in New York with these words:

'The astonishment and embarrassment of speaking and not being able to communicate are deeply humbling. Every day in America, I realized, I would have a fresh opportunity to make a complete fool of myself. Quickly, I learned to keep my mouth shut except when absolutely necessary. In the meantime, I read the movie marquees, I tried to follow the TV and radio programs. In secrecy I repeated words and phrases I overheard: Hey, smart aleck! Crackerjack. Okeydokey. Chase butterflies. Hogwash. Hold the phone. Go to the dogs.'

These strategies served him in good stead, it appears. Simic went on to become an acclaimed poet, writing fluently and expressively in English, and becoming the 15th poet laureate of the United States.

The strategy of avoiding communication while at the same time building up a stock of useful phrases is well attested in the literature on naturalistic (i.e. non-classroom-based) second language acquisition. It is not always as successful as in the case of Simic. Many learners never graduate beyond the stage of simply stringing memorised phrases together, while displaying little or no ability to deploy an evolving grammatical system in order to create novel utterances.

Children are quite different. Whether learning their first or a second language, children very quickly amass a battery of phrasal chunks, especially those that have an obvious pragmatic function, such as go away; it's my turn; see you tomorrow; you shut up. Formulaic language of this type not only speeds up the processes of speech production (it's easier to join chunks together than to generate novel utterances from scratch), but it also marks you out as a member of the group. And, significantly, there is evidence to suggest that a lot of this formulaic language is subsequently segmented into its components, which are in turn re-combined to form novel utterances. That is to say, out of 'the slimy mud' of phraseology, the child's grammar emerges.

Emergence in nature

The notion of emergence is a relative newcomer to the study of language acquisition. In the natural sciences, emergence describes the phenomenon whereby certain natural systems exhibit behaviours that are more than the sum of their parts, such that, as John Holland puts it, 'a small number of rules or laws can generate systems of surprising complexity'. A system is said to have
emergent properties when it displays complexity at a global level that is not specified at a local level. For example, the capacity of an ant colony to react in unison to a threat, or a flock of birds to swoop as if it were a single organism, is the aggregate effect of relatively simple interactions between individual members that are not co-ordinated in any centralised way. As Holland says, 'Somehow the simple laws of the agents generate an emergent behaviour far beyond their individual capacities.' Because there is no 'central executive' determining the emergent organisation of the system, the patterns and regularities that result have been characterised as order for free. In Roger Lewin's words, 'A fundamental property of complex adaptive systems is the counterintuitive crystallisation of order – order for free.'

Emergence in language

Some applied linguists – notably Diane Larsen-Freeman, Lynn Cameron and Nick Ellis – have found some suggestive parallels between language and other complex systems, both in the way that languages evolve over time, and in the way that language develops in an individual. A key feature that language shares with other complex systems is that it exhibits emergent properties. As Diane Larsen-Freeman expresses it, 'Language is not fixed, but is rather a dynamic system. Language evolves and changes ... [it] grows and organises itself from the bottom up in an organic way, as do other complex systems.'

The processes by which language 'grows and organises itself' are thought to be processes that – rather than being language-specific – are basic to human cognition and hence to all learning. One of these is our capacity to detect and remember frequently-occurring sequences in the sensory data we are exposed to. In language terms, these sequences typically take the form of chunks (also known as formulaic expressions or lexical phrases). Another innate capability is the capacity to unpack the regularities within these chunks, and to use these patterns as templates for the later development of a more systematic grammar. As Nick Ellis puts it, 'The acquisition of grammar is the piecemeal learning of many thousands of constructions and the frequency-biased abstraction of regularities within them.' It is as if the chunks – memorised initially as unanalysed wholes – slowly 'release' their internal structure like slow-release pain-killers release aspirin. Language emerges as 'grammar for free'.

Emergence in learning

Somewhat independently of these developments in psycholinguistics, corpus linguists have been coming to similar conclusions. Michael Hoey, for example, has looked at corpus evidence and noted how particular words and chunks re-occur in the same patterns. These patterns include collocations, such as good morning; good clean fun; on a good day ...; fixed phrases, such as one good turn deserves another; the good, the bad and the ugly; and the word's associated grammatical patterns (its collocations), as in it's no good + -ing. Hoey argues that, through repeated use and association, words are 'primed' to occur in predictable combinations and contexts. He concludes that 'what we think of as grammar is the product of the accumulation of all the lexical primings of an individual's lifetime. As we collect and associate collocational primings, we create semantic associations and collocations ... These nest and combine and give rise to an incomplete, inconsistent and leaky, but nevertheless workable, grammatical system.'

This, at least, is what seems to happen in first language acquisition, or when a second language is acquired at an early age. The fact that young children are cocooned in a relatively stable and narrowly delimited social environment, which they unabashedly attempt to manipulate for their own selfish purposes, and in which they jointly engage in many kinds of highly contextualised and ritualised activities, makes childhood an ideal time for appropriating and trying out formulaic language.

Adult learners, on the other hand, show greater variability in their capacity both to take formulaic chunks on board, and to re-analyse them for the grammatical information that they encapsulate. The failure to construct a mental 'phrase book' has a negative effect both on fluency and on idiomaticity. One possible reason for the relatively poor rate of chunk acquisition in older learners compared to children is that literate adults are more disposed to think of language as being composed of individual words and of sentences, thereby under-exploiting the functionality of phraseology. This 'phrase-myopia' may also be exacerbated by teaching materials and methods, which tend to separate vocabulary and grammar into two independent categories, and consign phraseology to an indeterminate no-man's-land in between.

Emergence in the classroom

More significantly, in classroom situations adults rarely use language for authentic social purposes. Yet a great deal of the formulaic language that native speakers have at their disposal is socially-motivated: it is used both to influence the behaviour of others, and to earn acceptance by others as members of their group. Adult learners in classroom situations, on the other hand, have few, if any, social needs that the classroom can be expected to satisfy. According to Alison Wray, 'Classroom learners are rarely aiming to communicate a genuine message with a beneficial outcome to their physical, intellectual or emotional state, so there is no drive to use formulaic sequences for manipulative purposes.'

And even when adult learners do internalise chunks of language, they are often incapable of unpacking the grammar latent within them. This may partly be due to the fact that many chunks, as well as being highly idiomatic, are not in fact grammatical at all, by normal standards. Expressions like if I were you; you'd better not; by and large; come what may, etc, yield little or no generalisable grammar. But a more significant block to phrase re-analysis may simply be a failure in noticing: if you don't see it, you won't learn it. In the opinion of Nick Ellis, 'a failure of noticing must clearly be one cause of cases in which, despite high frequency in the input, second language learners fail to acquire a particular pattern or feature.'
Finally and importantly, the much reduced input and opportunities for practice available to most learners mean that — for a system whose emergence depends primarily on usage — progress, if any, will be slow.

**Emergence in the syllabus**

If the productive potential of formulaic language is to be optimised, then, at least four conditions need to prevail:

- **Exposure** — to a rich diet of formulaic language
- **Focus on form** — to promote noticing and pattern extraction
- **A positive social dynamic** — to encourage pragmatic and interpersonal language use
- **Opportunities for use** — to increase automaticity, and to stimulate storage in long-term memory, and recall.

Exposure to a rich diet of chunks assumes that learners have access to plenty of authentic texts, and that classroom time is programmed to explore them. This is more likely to happen if phraseology occupies its own place in the curriculum, with its own free-standing syllabus. What would a ‘phrase syllabus’ consist of, and how would it be organised? Obviously, factors like frequency and usefulness would be important criteria, although the frequency of a sequence in a corpus is not a reliable guide to its perceived status as a learnable chunk.

Nevertheless, the criteria of frequency and usefulness suggest some kind of notional or situational organisation, not unlike a traditional phrasebook. Given the interpersonal function that many chunks have, a functional organisation, using categories like getting things done, obtaining service, managing a conversation, would also be helpful. On the other hand, if learners are going to be able to infer productive patterns from chunks, some kind of structural organisation would also be desirable. That is, all the chunks containing a sequence like have been seen (see box below) or in the [noun] of could be grouped together.

**Chunks with have been:**

<table>
<thead>
<tr>
<th>Frequency per million words in spoken English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source: Corpus of Contemporary American English (COCA)</td>
</tr>
</tbody>
</table>

A focus on the form of chunks, with a view to unlocking their generalisational grammar, can be engineered in many of the ways that teachers customarily employ when dealing with traditional syntax. These include: classifying and matching, labelling (of word classes), substitution (of elements within the chunk), re-ordering, and cross-linguistic comparison. Even techniques such as pattern-practice drills and substitution tables might usefully be disintegrated in order to draw attention to the formulaic nature of many chunks. Michael Lewis’s book *Implementing the Lexical Approach* is a good source of activity types for dealing with chunks and collocations.

Creating a classroom dynamic in which learners use language interpersonally as much as referentially assumes that learners identify with, and fully participate in, the classroom culture. A basic precondition for such a culture is one where the quality of communication is high, where (in Herbert Puchta and Michael Schratz’s terms) ‘the participants are being both frank and considerate, independent yet cooperative, and are speaking willingly and comprehensively to particular listeners about things that matter to them both’.

Finally, an approach that offers plentiful opportunities for use is also one where authentic communication is both valued and prioritised. But authenticity need not be the only criterion for the kind of practice that triggers emergent language processes. Mention has already been made of pattern-practice drills: other more playful language activities, such as chants (see box above) and recitation, drama and roleplay, poetry and hip-hop, may serve equally well as a context for exploring the productive power of chunks, and unlocking their generative potential.

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