The second edition of Reuven Tsur’s *Poetic Rhythm* exceeds the old one from 1998 with a hundred pages. Only minor changes have been added to the first ten chapters but the four new ones give a broader and also more relaxed extension to his subject. The new last chapter specifies his critique against older versification studies and gives more room for discussing the problem of meaning production in versification.

*Poetic Rhythm* aims at giving empirical evidence for a cognitive theory of versification, as presented in Tsur’s book of 1977, *Perception-Oriented Theory of Metre*. Nowadays, this book is almost impossible to get a hold of – for example, no library in Sweden owns it. Nevertheless, this is Tsur’s first important publication where he establishes cognitive poetics, a hot subject in aesthetic discussions today. He repudiates the idea that poetic rhythm might be analysed as a kind of object and instead asserts its character as grounded in perception. To prove this, he uses Gestalt psychology and findings in neuroscience with a focus on short time memory.

If poetic rhythm takes place in the human perception, where is it possible to investigate? The performance offers a possibility to study poetic rhythm. Tsur has collected an impressive amount of interesting poetry readings that demonstrate complicated solutions to contradictory formulations. We are presented with a huge amount of details concerning tone curves, peakings, delays and so on. A competent reading should strengthen both unity and complexity of an expression – something that shows the quality of the poem as well as that of the performer.

Tsur is the leading scholar today in versification studies as well as in cognitive poetics. What makes him extra important is that he has taken sides with versification as aesthetics and not as a kind of linguistics. He explores the poem as a complex net of formal and semantic devices, where you have to examine a great deal of details to understand meaning and beauty. In that way,
he might be seen as a follower of the Russian formalists and Roman Jakobson, who also promoted the importance of versification studies. They claimed that versification is organized violence against language, but Tsur speaks instead of the poem as organized violence against cognitive processes. This formulation catches the development from verse looked upon as language to verse as aesthetic experience.

Today cognitive poetics develops rapidly and we can distinguish at least two schools. Tsur’s followers are interested in things as emotion and memory studies as well as neurology. On the other side, there is an English school developing the findings of cognitive linguistics. Here Lakoff & Johnson’s theory of conceptual cognitive metaphors is a dominating theme. But Tsur remarks that poetic metaphors have little in common with the entities called conceptual metaphors that serve to understand the deep structure of thought rather than the perceived delicacy of a poem.

Schools of Metrics

Tsur was educated into the generative school of metrics. This can still be noticed in his occupation with the English iambic pentameter. More than that, many pages in the new book are devoted to discussions with certain generative scholars, Morris Halle & Samuel J. Kayser (whom he respects) and Paul Kiparsky (whom he calls into question). It is obvious that Tsur would like to have the blessing of his forerunners, or at least wants to convince them that aesthetic quality cannot be found in a set of rules. A poem can never be just a static object of investigation. If you believe that you are bound to miss the main point.

How do we distinguish a metrical from an unmetrical line, the generative school asks. Underlying this question is a presumption of a dominating binary structure in language. Tsur repeats time after time that he writes about English syllabo-tonic poetry and nothing else. Nevertheless, his findings are of interest for all kinds of poetry, while the problem of the so called unmetrical line belongs to English iambic versification.

The peculiarities of English pentameter might be historically explained. You can see that this measure is a co-operation between two different verse systems, French syllabic verse and English disyllabic meter. The solution often appears with the help of yet another verse system, the older four-beat line. The irregular pentameter is a historical phenomenon that is understood if you consider the English history of language. It is not quite certain that the “unmetrical” problem is of any interest outside this historical context.
Tsur’s observations of peculiar speech rhythms help us to explain rhythms in all kinds of poetry. Beside the pentameter, he has worked also with Hebraic and Hungarian poems. His method functions excellently even for modernistic poetry from all corners of Europe. Tsur argues that iambic pentameter gives the ideal length of a verse line, 10–11 syllables, and this should be a reason for concentrating on this kind of verse. But the four-beat line has the same extension of around ten syllables, a measure that is even more spread than the pentameter and a covered pattern in most free verse. In many literatures the pentameter was never common, but the older four-beat pattern seems to dominate through centuries in Northern Europe. This can be seen in Gasparov’s *History of European Versification* – and in reality.

However, Tsur has concentrated on the pentameter, mostly from the English baroque epoch. In this way he is able to keep an ongoing discussion with generative scholars. In the book, you will find names of forerunners like Chatman, Levin and Wellek & Warren, but you will miss the names of the great tradition in metrics like Tynjanov, Heusler and Gasparov.

**The Problem**

The rule of iambic pentameter is almost never confirmed in the poetic text. Nevertheless, the reader seems to be convinced of the existence of this pattern. Tsur’s standing example is the first 165 lines of Milton’s *Paradise Lost* where only two ones are regular. Despite this, the schema is intact in the mind of the reader. How come?

In the mismatch between language and pattern a problem appears for readers. Tsur draws the conclusion that our study should concentrate on performances of poetry, where it is possible to notice how the reader overcomes the differences, accommodating pattern as well as speech. In such a performance, conflicting patterns are simultaneously perceptible. Tsur’s book aims at investigating how and when a performance reinforces both unity and complexity of an expression, and thus promotes aesthetic quality.

Tsur’s concept of rhythm is in a way conventional and rather narrow – poetic rhythm appears in the combination of tactus and speech, when the pattern becomes modulated by word pronunciation. Poetic rhythm is determined by an abstract pattern which can successively be confirmed, disconfirmed and reasserted by language. In another way, his understanding of rhythm really is a revolution, as he locates it to the reader’s perception and not to language as an object. A performance is rhythmical when the sequences of versification
units and linguistic units are simultaneously perceived. Both the conflicting patterns can thus be apprehended.

The main theoretical background to this book is a renewed Gestalt psychology. In the fifties, Rudolf Arnheim (picture) and L.B. Meyer (music) developed the original Gestalt psychology in new ways. Cognitive poetics looks back to their apprehension of perceptions, accepts their results but equips them with another theory. Tsur uses their findings and adds more himself. The verse line is understood as a system that determines the character of its parts. The so called Gestalt laws turn out to be an important possibility for understanding poetic rhythm – one of them, similarity, seems to be a key concept already in Jakobson’s Principle of Equivalence. Meyer, working with temporal lapses, calls it ‘the law of return.’

A verse line takes three seconds to pronounce, approximately. This is, approximately, also the extension of the short time memory. A famous paper by Frederick Turner and Ernst Pöppel from 1983 established this 3-second-interval according to short time memory in poetry from different cultures. Tsur is aware of this cognitive limit without mentioning the article. Instead, he goes back to another classic in the field, the so called ‘magic seven’ of George A. Miller from 1956. The human mind seems to be able to keep seven items on-line at the same time, approximately. Seven syllables, approximately, are a usual size of a speech phrase, and three seconds goes well together with the 10–11 syllables of a pentameter line.

Both the Turner & Pöppel paper and the Miller book are very old in this context. Neuroscience is developing very fast today. Nevertheless, their results seem to be right, or almost right. New research confirms these limits, items and seconds, approximately. Tsur made a lasting contribution for aesthetic brain research when he initiated relevant measurements at Haskins laboratories thirty years ago. The results are collected in his book of 1992, What Makes Sound Patterns Expressive? One hopes for possibilities to repeat all these aesthetic motivated measurements in the light of recent research.

A distinct result of using gestalt theory in poetics is Tsur’s so called back-structuring. In the perceptual process, you will interpret the gestalt first as it is closed. Tsur presents many convincing examples of this in phonetic details. What you actually hear will change according to gestalt laws in the very perception. Back-structuring also explains a detail in Jakobson's thinking in equivalences, namely why the second rhyme word evidently keeps the first one alive in the reading mind. To me, this has always been a mystery, and the usual explanation in terms of associations is not very trustworthy. But if you think of the rhyming line pair as a closed gestalt, it is obvious that two similar parts of this gestalt go together according to the gestalt law of similarity.
Method and objectivity

Tsur aims at giving empirical evidence for a cognitive theory. How to do, then, when the process takes place in the perception? He uses recordings where actors perform classical texts, and the investigation treats these interpretations. Tsur examines how the actors have solved a range of different problems they have met in the versification. In that way, he has obtained a stable body of material with all the objectivity you may wish for. Sometimes he discusses several readings of the same text. But there is no objective solution to the conflicts between speech and rule, there are only different performances telling us about the actors’ choices when handling the difficulties of versification.

So, this book analyses the readings of actors, which means that it does not discuss aspects of silent readings. The listening to recitations does not belong to the agenda either, leaving out the fact that listeners tend to simplify the rhythmical figures. Here are two problems that cannot be solved with the kind of methodical accuracy that Tsur tries to attain. Nevertheless, in future they must be discussed somewhere. So, you can say that Tsur’s method has developed a stability that perhaps could be used for more intricate research problems further on.

The performances give rise to phonetic registrations where you can examine small details in length and tone of different phonemes. One peculiarity within versification studies is that the shape of sound and meaning production depend on very small units, milliseconds that nevertheless are easily perceived. In practice they are plenty of such units, something that considerably limits what is possible to investigate. You must choose very good examples, and hereby we can trust Tsur, but you need both patience and watchfulness to follow him sometimes. Discussions of, for example, “stress maximum in the 5\textsuperscript{th} position” last for several pages, but when you have grasped the point it is no doubt worthwhile.

The so called late-peeking seems to be one of the most important news of this volume. Maximum takes place in different positions within a vowel – and even some consonants. If the peak comes late this will create a strong forward direction within the actual gestalt. Another main theme is the importance of grouping and articulation in a performance. Those are the tools the reader uses when he tries to overcome the conflict between speech and pattern. Grouping and articulation produce necessary parsing, the boarders between gestalts. Special interest is also given to enjambments, consecutive stresses, caesuras and stress maximum in weak positions.

Tsur looks for scientific stability with the help of sound registration, a stable body of thorough investigations. But there are differences between a registration and the sound perception of it – you don’t hear what you actually hear.
Tsur is of course aware of this, not least when he discusses the reasons for perceived tactus. We think that the time span between stress maxima of a metered line is (rather) even, but registration shows that we are wrong. The time span between maxima is almost as irregular as in ordinary speech. Tsur presents a possible explanation for this illusion. The so-called metrical set is a strong gestalt structure in the mind of the reader – strong enough to dominate.

Cognitive Economy

Tsur explains divergences like this with the help of something he calls cognitive economy, a specification of the Gestalt law of Simplicity, a key term in Gestalt theory. Strong, independent patterns are simple with clear cut contrasts. Since it is not possible to change one single phoneme in a poem, the only way to influence sound patterns in performance is grouping and articulation – in order to make the sound stream more efficient according to meaning and beauty. Tsur says that this will save, what he calls, mental processing space.

Hereby I think he is right, but I am not sure of his explanation, the so called Limited channel capacity hypothesis. He has taken this theory from Neisser’s classical textbook in cognitive psychology from 1968, and Tsur’s idea of channel capacity is coloured by the communication theory of the seventies. Neisser means that there is a limited amount of mental space, and I don’t think that brain research of today would express it that way. Nevertheless it is obvious that the brain chooses effective solutions, considering basic evolutionary aspects.

Tsur often speaks of two kinds of versification as well as two kinds of performance, convergent and divergent. In the first case simplicity is central and meaning is easily grasped. In the second case the poetic mode of speech perception is delayed, something that produces more meaning, more feeling. The delay burdens the memory system as well as it feeds an expectation of closure and strengthens the metrical pattern. This is bad cognitive economy but maybe a good poem. However, grouping and articulation could just as well help the performer to give room for the complications of a divergent text. The complexity of sound and meaning is possible to perform observing cognitive economy, with the help of frequency and length.

The metrical set is one strong component in this complex performance process. It seems to function much in the same way as the so called image schema does for Mark Johnson – a gestalt pattern in perception deciding among possible forms. It is obvious that perception adds some kind of pattern that finally determines the form of a performance. The metrical set governs the
tactus of a pentameter poem, while the concept of image schema is broader. There are many vivid patterns to govern your performances also when no tactus is present to lead the process – as is the case in free verse.

Tsur calls the image schemas reductive. I would say that it depends on how the critic handles this tool. Just as the metrical set never can or should be distinct, nor can this be the case with an image schema. Both these kinds of perception pattern are only one component in the process of articulation and listening. Yes, something in this lapse is reductive, and that reduction might be labelled cognitive economy – the perception process contains a reductive moment. The critic, however, must use his big ears not to be reductive in his analytic work.

Summing-up

With the entrance of cognitive poetics versification studies has become a central issue. From a position as an odd kingdom of nerds, metrics now is an important field in poetics, a discipline where basic questions of aesthetics and artistic language can be studied. And poetic rhythm must be said to be the main subject of versification.

Gestalt psychology is of necessary significance even today. Tsur’s measurements differ from the old Gestalt school exploring a new theory that was badly needed. Gestalt theory is corroborated by findings in neurology combined with phonetics. Here aesthetic observations are strengthened by hard facts, but those hard facts will not tell us anything of importance without aesthetic competence.

This book is an achievement in the great tradition of Roman Jakobson, Jurij Lotman and Mikhail Gasparov. It represents a considerable progress in versification studies as well as poetics, a real milestone. We are happy to see this second edition.