Typologies and digital databases of proverbs as research tools Tipologije in digitalne zbirke podatkov pregovorov kot raziskovalna orodja

The author of this presentation has had the opportunity to help in saving and bringing into use a large database of proverbs and their literal sources. Professor of folkloristics at Helsinki University, Matti Kuusi (1914-1998) wanted to test his idea of creating an international typology of proverbs. The idea was to create a flexible system of proverb types with a versatile typology based on different cultural meanings accrued within these traditional expressions. Alternative interpretations of proverbs connected to their changing forms and additions in relation to typologies should be discussed. Developing cross-references between proverb types within the typology to help with their interpretation has proven difficult. The variety of changing contexts of proverb use is a challenge for any flexible digital network of proverb interpretations.

 Keywords: Matti Kuusi, proverbs, paremiology, typology, semantic classification, database

Avtorica članka je imela priložnost pomagati pri reševanju in uporabi velike zbirke pregovorov in njihovih dobesednih virov. Profesor folkloristike na Univerzi v Helsinkih, Matti Kuusi (1914–1998) je želel preizkusiti svojo zamisel o oblikovanju mednarodne tipologije pregovorov. Zamisel je bila ustvariti prilagodljiv sistem tipov pregovorov z vsestransko tipologijo, ki bi temeljila na različnih kulturnih pomenih, nabranih v teh tradicionalnih izrazih. Obravnavane so bile tudi alternativne razlage pregovorov, povezane z njihovimi spreminjajočimi se oblikami in dopolnitvami v povezavi s tipologijami. Razvijanje navzkrižnih povezav med tipi pregovorov znotraj tipologije, ki bi pomagale pri njihovi razlagi, se je izkazalo za težavno. Raznolikost spreminjajočih se kontekstov uporabe pregovorov je izziv za vsako prožno digitalno mrežo razlag pregovorov.

 Ključne besede: Matti Kuusi, pregovori, paremiologija, tipologija, semantična klasifikacija, podatkovna baza

Classification and conceptualizing are central tools for scientific research. In order to find regularities, similarities and dissimilarities between phenomena you need some criteria for structuring the material. In practice, groups and hierarchy are more or less artificial forms of classifying the material at hand. Problems arise only when we have to use pre-established groups and find slots between them. Sometimes you can even refuse to accept a given classification.

Thus, a better approach than static classification would be a dynamic network and its nodes. The aim of this article is to study typologies and digital databases of proverbs. Most of them are focused on one language area or serve the contrastive paremiology of two or three cultures.

Construct an all-embracing and global proverb typology seems like an irrational challenge. Who would realistically consider the possibility of capturing the multidimensionality of proverbial semantics, and who would embark on the task of searching

for global proverb types equipped with a general meaning? As yet, there have only been several such attempts. One of them, the Finnish Matti Kuusi International Type System of Proverbs¹ is the main focus of this article. Another general typology of proverbs is elaborated by the Perm-born Soviet paremiologist Grigory Permyakov² (1919–1983).

Proverbs are understood here to be a global folklore genre, which is unique in each culture and still alive in folklore and vernacular speech.³ The internationality of the proverb genre as a whole is unanswerable. The global or near global distribution of numerous proverb ideas and generative patterns is well proven.⁴

Professor emerita Galit Hasan-Rokem collates well the multifaceted challenge concerning any proverb typology.

The study of proverbs has long been a subject of research by scholars from different disciplines, such as folklorists, philologists, logicians, psychologists and anthropologists.

Consequently, various research motivations and methods have produced diverse approaches towards the organization and classification of proverbs into convenient indices for further search and retrieval. These approaches mostly differ in what should be considered key proverbial characteristics upon which an index or classification scheme should be devised, for example: text, logical or syntactic structure, context of usage, literary source, time and country of origin, or semantic field (Hasan-Rokem and Kats 2009).

Folkloristic, linguistic and social psychological approaches are all useful for appraising how different meanings accumulate for each proverb type. Literature and historical research also have valid methods for paremiology. The history of paremiology, the traditional study of proverbs, is strongly based on printed sources, dictionaries and collections. Its foundation lies in lexicography, safely rooted in linguistics. Constructing a proverb typology that would meet all the challenges that different scholars might pose is therefore a complex task.

1 The background of the Matti Kuusi international database and typology

Matti Kuusi (1914–1998), professor of folkloristics at Helsinki University, wanted to test his ideas for an international typology of proverbs. The idea was to create a flexible system of proverb types with a versatile typology based on different cultural meanings

 $^{^{1}}$ https://www.mattikuusiproverbtypology.fi/ (visited 18.12.2023). The author of this article is acting as one of the administrators.

More on the significance of Permyakov in: http://peter-grzybek.eu/science/publications/1985/grzybek_1985_permyakov.pdf (visited 18.12.2023).

³ The best recent source for definitions of the proverb is Hrisztova-Gotthardt's and Aleksa Varga's comprehensive guide to proverb studies *Introduction to Paremiology* (2014).

⁴ More about proverb patterns in Lauhakangas (2021).

accumulated within these traditional expressions. How did he end up realising his idea of an international typology? Let us shed light on his background in folkloristics and his qualifications to construct a cross-cultural proverb typology.

Kuusi's dissertation in 1949 was a study of Finnish Karelian Kalevala epics and their typology. He had noticed that proverbs were potential instruments for dealing with extensive material and making conclusions about language variations and structures (Kuusi 1978: 11). Kuusi's interest was in essential questions of human mentality and he soon became attentive to comparative paremiology. The idea of creating an international typology of proverb types was latent in his early research methodology.

Kuusi's first challenge in paremiology was a source-critical study of the oldest collections and unpublished manuscripts of Finnish proverbs. His scientific approach did not prevent him from converting the results into a popular Finnish collection (1954).

During the 1960s, Kuusi instructed students to find proverbs in the manuscripts of the folklore archives of the Finnish Literature Society. He continued his project by leading his assistants to construct a card-index of c. 300,000 archival variants of proverbs from Finnish parishes. A guiding principle was to gather all the variants for each proverb type. Meanwhile, in his free time Kuusi began collecting foreign-language equivalents of Finnish proverb types, noting down references to proverb collections and bilingual dictionaries. He had access to the main European collections, multilingual collections and special editions, which he bought privately or which were sent to him during his time as editor-in-chief of the *Proverbium*⁵ journal (1965–1974). He continued with this activity until the end of the 1980s, constantly searching for the latest archival materials to be saved in the folklore archives in Helsinki (Kuusi 1988).

Kuusi wrote his first outline for constructing a 'type-index of international proverbs' in Proverbium 15 (1970a: 473–476), and a detailed experiment of categorizing number proverbs as a test bed for further research in Proverbium 19 (1972: 699–735). A much-needed challenge for typological work came from the Soviet Union, when Grigory Permyakov's book At pogovorki do skazki was published in 1970. It was partly translated into English: From proverb to folk-tale. Notes on the general theory of cliché (1979). Kuusi had already commented the classification in Permyakov's important collection Poslovitsy i pogovorki narodov vostoka [Proverbs and sayings of the peoples of the East] (1968 [1961]) in Proverbium 15.

Kuusi took elements of basic oppositions from Permyakov's theory and typology for his own classification. Kuusi wanted to 'construct a universal comparison of deep

⁵ According to Kuusi's own notes, the scientific journal was established in Helsinki through the persistent encouragement of prof. Archer Taylor. It began as *Proverbium*, later evolving into four volumes of *Proverbium Paratum* by prof. Vilmos Voight et al. (1980–89), followed by prof. Wolfgang Mieder's *Proverbium. the Yearbook of International Proverb Scholarship* (1984–2021), now an open access peer-reviewed journal helmed by editors-in-chief Dr. Melita Aleksa Varga and Dr. Hrisztalina Hrisztova-Gotthardt (2022–) https://naklada.ffos.hr/casopisi/index.php/proverbium/about (retrieved 18.12.2023)

structures of proverbs'. As early as the 1960s, before he became actively involved in constructing the universal typology, Kuusi began cooperating with Estonian scholars, especially with Arvo Krikmann who was also interested in analysing proverb types. Krikmann's leading idea was to find an optimal level for comparing proverb types, their history and distribution in different cultures. Krikmann's work continued after Kuusi's death. He published a classification of Estonian proverbs in English (Krikmann 1989) and in 2013 he carried out an unpublished experiment⁷ on his typology using an English corpus. Krikmann's typology might interest those who prefer studying the linguistic structure of proverbs.

While waiting for the beginning of the first Baltic-Finnish proverb project, which was delayed until the 1980s due to political reasons (Kuusi et al. 1985), Kuusi focused on other cultures. For example, he accidentally stumbled upon a Finnish missionary's unpublished collection of African Ndonga proverbs and began detailed work on equivalents in African languages (Kuusi 1970b).

We can conduct a thought experiment and compare the current AI compilation and search facilities to Kuusi's 'personal computer', namely his ability to process the material he had in his memory and personal card index with literature references. He possessed an exceptional visual memory and had creative ways of connecting comparable network nodes.

The main focus of Kuusi's project was accumulating references for each proverb type. By connecting proverbs from different sources he was able to hypothesise either on the similarity or simultaneity of these cultural items. The Matti Kuusi international proverb typology made connections between Polish proverbs, Chinese or Finnish dialectal utterances, traditional wisdom in the Ndonga dialect, etc. The connections are suggestions to be evaluated, ideally on an individual basis.

Kuusi (1966: 97–98) had three basic concepts concerning any proverb. Each one has a core element, a form or schema can define a proverb's type, but the most critical thing is to evaluate the idea (especially to recognize synonymous proverbs).

That was how he arranged and searched for prototypical proverb types and their exceptions. We can imagine that he had his own ontology,⁸ in the modern sense of the term, in his mind. This term is now used in digital humanities to refer to the process of composing search engines.

⁶ An unpublished research plan for the second stage written immediately after the *Proverbia Septentrionale* was published in 1985.

⁷ The author of this article received a draft file of the applied typology from A. Krikmann before his serious illness and death in 2017.

Ontology is a set of concepts and categories in a subject area or domain that shows their properties and the relations between them. E.g. 'what's new about our ontology is that it is created automatically from large datasets' (source: languages.oup.com).

2 The uniqueness of proverbial thinking brought up in Matti Kuusi's proverb typology

The construction of the Matti Kuusi international database and typology has been described in a detailed report (Lauhakangas 2001), and the proverb types of Kuusi's system have also been used and studied from the standpoint of the social functions of proverb use (Lauhakangas 2004, 2023). The material and its classification open the possibility of gauging tensions in the human mind on a broader scale. They touch all possible human situations, preconditions, options and means of survival.

For an over-all picture of Kuusi's whole type system, the main themes cover both concrete human conditions such as 'Practical knowledge of nature' and abstract concepts such as 'Time and sense of time'. The focus is always on human experience. It may be experience of the world and life or how to cope in life and learn. The most elaborate and central paremic questions deal with human interaction, communication and hierarchy.

There are themes that are specific to proverbial thinking such as 'basic observations and socio-logic' (Kuusi's main theme C). The term 'socio-logic' was actually chosen by the author of this article when constructing Kuusi's relational database. It derives from the work of Paul Goodwin and Joseph Wenzel (1981) and is a socially generated practical way to reason. David Cram (1983) explains proverbs as quasi-tautologic axioms. They are expressed like self-evident conclusions, but they have an idiosyncratic form that allows inconsistency. Finally, the social context determines the effect. Any metaphor is accepted when it is needed.

The main theme C has six classes with four to nine subgroups each. Here are some examples.

- (1) Boys will be boys. C1b 11
- (2) You can't skin a flint. C3a 10
- (3) Beware of a silent dog and still water. C5e 10

The socio-logic way of thinking characteristic of proverbial reasoning can also be approached from a structural point of view as a special form of syntactic architecture. Wolfgang Mieder has shown that traditional proverbial markers in American English have been transformed into simplified forms, especially syntactic and phonological devices (Mieder 2012: 144–147; Mac Coinnigh 2014: 118–119.) We can still ask if this linguistic evolution has substantially changed the function of proverbs as practical tools of reasoning.

Kuusi introduced another important theme in proverbial thinking: the notion of 'sense of proportion' (Kuusi's main theme E). It deals with the ways people can explain situations better when events unfold unexpectedly, but a proverb aptly defines the on-going situation. The following three proverbs demonstrate this way of thinking.

- (4) Crooked logs make straight fires. E1h 11
- (5) Behind the cross there is the devil. E1i 13
- (6) There is good in everything, even in misfortune. E1k 31

3 Current digital sources and databases of proverbs

Nowadays, there are more or less entertaining tools available on the internet such as Gary Martin's web-based archive of phrases, sayings, quotes and clichés. He is the author of the English Meanings and Origins section of the Phrase Finder website, which was founded in 1995. The website includes 680 English proverbs, half of them equipped with external links to explanations and historical information. Martin has been working on a computational linguistics research project. His aim is to offer historical knowledge and explanations of phrases, so his approach to classifying phrases involves typical keywords, which we could find in any collection of quotations. Martin does not work for any institution, but he is one of those valuable "content creators" who help connect old sources to modern databases.

One of the most scientific tools for studying special language corpora is an Austrian Academy Corpus.¹⁰ For example, it includes digitized magazines. One of them is "Die Fackel"¹¹ 1899-1936, originally published and almost entirely written by the satirist and language critic Karl Kraus in Vienna. The electronic text of the entire journal has more than six million tokens. It was already available in 2007 with indexes and search and navigation tools in a functionally designed interface (Biber 2015).

The Sketch Engine, ¹² which makes automatic derived summaries of the grammatical and collocational behaviour of words, is a huge resource for studying words in their context in different languages. Another large system that has opened new possibilities for lexicographers and phraseologists is GATE – General Architecture for Text Engineering, ¹³ which has been developed at the University of Sheffield from 1995. It is a global tool for natural language processing tasks.

International databases specialising in proverbs have also been developed as part of academic projects. A good example is the Sprichwort-Plattform: Sprichwort-Datenbank.¹⁴ In addition to the database documents, there is material on the current use of proverbs in five interlinked languages (German, Slovenian, Slovak, Czech and Hungarian). This means you can access a large number of authentic texts in which the proverbs appear, and obtain information about meanings, abnormalities in use, etc.

An empirical study has demonstrated that even widely-used online corpora and marketing tools, such as Google Trends, make it possible to map the dissemination of modern proverbs (Villers 2022). The possibility of obtaining samples of real life

⁹ https://www.phrases.org.uk/meanings/proverbs.html (retrieved 18.12.2023).

¹⁰ https://arche.acdh.oeaw.ac.at/browser/oeaw detail/23885 (retrieved 18.12.2023).

¹¹ https://fackel.oeaw.ac.at/ (retrieved 18.12.2023).

¹² https://www.sketchengine.eu/ (retrieved 18.12.2023).

¹³ https://gate.ac.uk/ (retrieved 18.12.2023).

¹⁴ https://www.germanistik-im-netz.de/informieren/detail/ressource/sprichwort-plattform-sprichwort-daten-bank/ (retrieved 18.12.2023).

situations was practically impossible before the appearance of internet discussion forums. We still have time to collect reliable material before algorithms begin to remove whatever mimics human conversation.

4 The point of view of information technology

There has been a recent attempt to classify proverbs semantically (Zhitomirsky-Geffe, Prebor, and Bloch 2017). This is a small-scale study called "Improving proverb search and retrieval with a generic multidimensional ontology".

The authors write about the goal of their research in the abstract. Their aim seems to fit with the purpose of Kuusi's classification system. However, another criterion for success emerges, which is entirely connected with information retrieval:

- [...] to develop a generic ontological model for proverbs that unifies potential classification criteria and the various characteristics of proverbs to enable their effective retrieval and large-scale analysis.
- [...] to improve the search recall, precision, user satisfaction, and efficiency, and to minimize user effort during the search process.

A small proverb corpus has been utilised to study to what extent given semantic relations speed up the search for proverbs. This is the point at which folkloristic and linguistic aims differ from the objective of information technology. Although the Israeli team indicates their target to build 'a multidimensional ontology suitable for proverb classification', the criterion for the 'effectiveness of the constructed ontology' seems to be more about user satisfaction than achieving increased understanding of the proverb genre.

The Israeli research group introduces a definition of ontology as a semantic scheme, which comprises the main classes (concepts) of a given domain of knowledge, their properties, inter-relationships and instances (Noy & McGuinness, 2001).

The Israeli group used some of Kuusi's main classes and similar terms such as antonyms and causal relations. When studying their solutions for proverb ontology, there were familiar analyses, such as 'cause-of', 'antonym', 'part of'. The authors write critically about Matti Kuusi's typology:

[...] the structure of the thematic hierarchy is based on free associations that might in some cases be quite controversial. In addition, some of the theme classes represent the explicit terminology of the proverbs related to them (e.g. "natural elements"), while others convey their implicit meaning (e.g. "social position").

The Israeli group's claim that Kuusi 'had often used free association' can be viewed in light of Kuusi's expertise in folklore and paremiology prior to constructing his typology. The second part of the criticism bypasses the cross-reference system in Kuusi's typology.

They differentiate between ET as 'explicit terminology' and MT as 'metaphoric terminology'. For metaphoric use they have chosen 'Kuusi's generic categories: social elements, cognitive elements, elements in human life, elements of time and elements of religion.'

The Israeli team accepted many concepts common to Kuusi's main groups: 'conception of morality', 'communication', 'dynamic of needs', 'human life', 'time', 'sense of proportionality (relativity)', 'social interaction', 'social life'. But they have used some concepts that belong to the subgroup level in Kuusi's classification, on the same level: 'social status', 'family ties', 'success', 'work'. Their terms, such as 'women', 'studying' and 'work' seem quite non-analytical, and some terms like 'criticism', 'grading', 'behaviour', 'element in human life' and 'person' seem miscellania. The small scale of their corpus naturally explains the difficulties to construct any hierarchy of typology. Even a more difficult challenge is "to bind the metaphoric concepts to their semantic interpretations", if we think about multifaceted nature of proverbs.

5 The importance of internal connections of the Matti Kuusi type-system

It has been difficult to find ways to create such cross references between proverb types in the typology that would help their interpretation. The variety of changing contexts of proverb use is a challenge for any flexible digital network of proverb interpretations.

When the language of folklore is concerned, it is pointless to expect that concepts would be nicely distributed to categories of concrete, abstract, metaphoric and semantically interpretable items. For example, 'bread' as a word in a proverb may be translatable to almost all languages, but the meanings of 'bread' in different contexts and in all the layers of each culture, in which the word 'bread' is used may considerably differ from culture to culture.

Professor emerita Galit Hasan-Rokem in Hebrew University of Jerusalem has commented the difficult question about proverb semantics: "The most important part of the meaning of the proverb lies outside of it" (1982: 15). This brings the need of contextual knowledge to qualify the classification of proverbs. But we can also take Hasan-Rokem's argument to remind that there are general characteristics of proverbial speech that we must be aware. They are present in other genres of oral tradition, too. For example, the stylistic device of hyperbole, exaggeration is realized, certainly understood and expected as part of narrative as well as proverbial speech. For example

- (7) Fear has a thousand eyes or
- (8) Buyers want a hundred eyes, sellers none.

This is what we must always be prepared for when we try to make consistent classifications of proverbs – especially international proverb lore. The material as such is actually impossible to delimit to exclusive classification. Overlapping is more like

strength of proverbial effectiveness. That is why we need references both to explicit terminology and to implicit meanings.

Kuusi's database and typology is full of this kind of cross-references.

Connections between the next three proverb types in Kuusi's typology add possibilities to interpret the chosen proverb type in comparison not only with the other proverbs of its subgroup, but with those in other categories. The first proverb type A1a16 is an example, how proverbs can be taken as observations and knowledge of human conditions. The second proverb type T1j 20 is a cross-reference to the previous connecting it with the idea of the proverb image "Coming and going with water". It refers to occasional or accidental gain. The third type T2a 36 parallels the metaphors of 'water' and 'wind'.

- (9) What has come with water, goes with water. (A1a16, a translation from Maltese)
- (10) By river come, by water go. (T1j 20, a translation from Chinese)
 Was mit der Flut kommt, geht mit der Ebbe wieder weg.
 Quel che vien di ruffa in raffa, se ne va di buffa in baffa.
- (11) What comes with the wind, leaves whistling (T2a 36, English)

The next proverb type (12) is primarily bound or connected to a proverb subgroup concerning questions about age. The cross-references to other subgroups give at least four possibilities for studying its connotations. If we had the social contexts where this proverb was used at our disposal we could better interpret its impression.

(12) Lazy youth makes (for a) lousy (old) age. G6c 13

1. the element of age G6c If not x when young, then not y, when old

2. X will produce a corresponding y C2a a reward thanks to action

3. x= not work – y= no food M7a diligence and efforts will be rewarded

4. honour and shame
 5. the element of time
 T3c preparing for the future

6 Applications of Kuusi's typology

Some scholars have used Matti Kuusi's typology or at least reacted to it. George Goce Mitrevski writes about the classification of Macedonian Proverbs in an electronic database and notices (correctly) that Kuusi's typology is an extendable system. He appreciates the possibility of 'adding additional themes and classes, as well as of expanding the depth of the coding system'. Mitrevski emphases their 'need to index a variety of relevant data about each proverb, and to be able to construct complex queries when selecting proverbs with specific characteristics'. That is why their 'data in the database is defined so that it can be reorganized and accessed in a number of different ways depending on specific needs (Mitrevski 2007: 19)'. Their aim has been to accomplish projects of contrastive paremiology in the Balkans.

The most recent study in which Kuusi's typology has been applied is an analysis of the forms and functions of overstatement in Kurdish proverbs (Muhedeen and Ahmed 2023: 61). Scholars found five out of thirteen categories suitable for a model of their study. These were the main themes: 'Basic observations and socio-logic', 'Concepts of morality', 'Agreements and norms', 'Coping and Learning', 'Time and Sense of time'. There are two examples of proverbs connected to the 'Coping and Learning' group. One of them is

(13) 'He has forded a thousand waters, his ankle has not become wet.'15

The authors comment that an overstatement is used for the sake of emphasis to show how experienced the person is. A linguist would recognize only the stylistic device of hyperbole.

The next proverb example has been situated in the 'Time and Sense of time' group:

(14) 'In (all) seven heavens he has no star.'

'The implied meaning of the proverb is that a person is so unlucky that they enjoy no luck in anything.' Authors interpret the use of overstatement so that the listener will neither take the meaning in a literal sense nor as a lie. They continue explaining: 'If this proverb is uttered in a situation where a person faces lots of opportunities and loses all of them in turn, humour will be the function of the used trope' (Ibid. 64–65).

They seem to apply Kuusi's main themes to Kurdish proverbs from the point of view of social interaction between the speaker and the listener.

The general problem in classifying proverbs lies in determining to what extent it is justified to typify proverbs from different cultures on common semantic criteria. Even if we could agree on defining proverbs as impersonal yet impactful utterances or speech in which one appeals to the authority of a third person (see Mukařovský 1983 [1971]), what criteria can we use to categorise these expressions under common key terms? Do we know which expressions belong only to ritual use, which are euphemisms or which are completely out of use?

Accessing Kuusi's material and typology was the basis on which the author of this article worked on another project twenty years ago. We had the possibility to get closer to the roots of our own culture. Scholars in Finland and Estonia continued working on a large project of contrastive paremiology from the 1980s concerning the proverbs of Fenno-Ugric people around the Baltic Sea (Kuusi et al. 1985). *Proverbia Septentrionalia* II (not yet published) is a very detailed corpus. The database is the result of comparing archival material collected in museums of literature and archives of tradition both in Helsinki and in Tartu.

When the distribution of Fenno-Ugric proverb types in the subgroups of the themes of Kuusi's typology were compared to the percentages in the international database,

¹⁵ The Kurdish proverbs are from the collection: MacKenzie, N. 1970: Some Kurdish Proverbs. *Iran*, Vol. 8, 105–113. http://www.jstor.org/stable/4299636 (retrieved 18.12.2023).

the amounts proved to be almost the same in both corpora. Only the main 'practical knowledge of nature' group was more represented in the Fenno-Ugric corpus than in the global proverb corpus. The explanation may lie in the abundance of weather proverbs and practical advice of local peasant cultures.

The author of this article primarily adopts a social psychological approach, but the key terms and theories concerning paremiology come from the fields of folkloristics and linguistics. The practical need to use proverbial databases often arises from translation studies and cognitive linguistics. Whatever the motivation for studying proverbs, there is much work to be done to digitise this genre of oral tradition and its interpretation. Both archival and field research are important for identifying the characteristics of the proverb genre and finding out how people still create novel compositions or anti-proverbs on the basis of proverbial patterns.

7 Summary

Matti Kuusi's proverb typology is grounded in the basic manners of human perception. It depends on the aim of specific research how the typology is used. The subject matter of the database – the proverb types with their variants – are like hypotheses concerning the similarity and simultaneity of proverbs in different cultures.

An important quality of typologies and the databases connected with them should be their flexible application to the needs of users. That is why any system of cross-references between proverbs, anti-proverbs and their classification should be developed into a dynamic network. There is much to do in contrastive paremiology, cultural and translation studies and folkloristics to equip proverbial databases with contextual evidence.

We should seek the best ways of obtaining reliable translations, authentic experience and contextual data from different cultures in order to find out which proverb ideas can be called 'global'.

That is why the typology must be used as a grid of relations between different levels of interpretations. Kuusi did not receive much feed-back about his system in the 1970s, although he wrote in 1970:

An index of international proverb types cannot be successful if it is the work of a single man. It presupposes international cooperation, consultation and the consolidation of divergent scholarly interests (Kuusi 1970a).

Nowadays, it is widely recognised that the synergy of research capacities is necessary for producing successful scholarly work. Depending on the research requirements, there are now better possibilities to combine or supplement different typologies. Krikmann's typology (1998) is useful for those who wish to survey the linguistic structure of any proverb corpus based on cultural meanings. There could also be special cultural nuances influencing the definition of new semantic classes in the Matti Kuusi typology.

Kuusi and Permyakov were system builders who drew on their exceptional personal memory capacity and we can try to further their work using new technology.

References

- Biber, Hanno, 2015: AAC-Fackel. Das Beispiel einer digitalen Musteredition. In: Baum, Constanze; Stäcker, Thomas (eds.), Grenzen und Möglichkeiten der Digital Humanities. DOI: http://dx.doi.org/10.17175/sb001 019.
- Cram, D., 1994 [1983]: The linguistic status of the proverb. In: Mieder, Wolfgang (ed.), Wise words: Essays on the proverb. New York: Garland, 73-97.
- Goodwin, Paul; Wenzel, Joseph, 1981: Proverbs and Practical Reasoning: A Study in Socio-Logic. In: Mieder, Wolfgang; Dundes, Alan (eds.), The Wisdom of Many: Essays on the Proverb. Garland Publishing, 140–160.
- Hasan-Rokem, Galit, 1982: Proverbs in Israeli Folk Narratives: A Structural Semantic Analysis. Helsinki: Academia Scientiarum Fennica (Folklore Fellows Communications, 232).
- Hasan-Rokem, Galit; Kats, Pavel, 2009: From a Structural Semantic Analysis towards a Computational Proverb Classification Framework. In: McKenna, Kevin (ed.), The Proverbial "Pied Piper". Festschrift Volume of essays in Honor of Wolfgang Mieder on the Occasion of his Sixty-fifth Birthday. New York: Peter Lang, 111–125.
- Hrisztova-Gotthardt, Hrisztalina; Aleksa Varga, Melita (eds.), 2014: Introduction to Paremiology. A comprehensive guide to proverbs studies. Warsaw, Berlin: De Gruyter. DOI: https:// doi.org/10.2478/9783110410167.
- Krikmann, Arvo, 1998: On the relationships of the rhetorical, modal, logical, and syntactic planes in Estonian proverbs. Part 2. Folklore. Electronic Journal of Folklore 8, 51–99. DOI: http://dx.doi.org/10.7592/FEJF1998.08.syntmod2.
- Kuusi, Matti (ed.), 1988: Rapatessa roiskuu. Nykysuomen sananparsikirja [When you splatter it splashes. A collection of proverbial phrases of current Finnish]. Helsinki: SKS.
- Kuusi, Matti et al. (eds.), 1985: Proverbia Septentrionalia. Helsinki: Academia Scientiarum Fennica (Folklore Fellows Communications, 236), 29–36.
- Kuusi, Matti, 1978: Suomalaista, karjalaista vai savokarjalaista? [Finnish, Karelian or Savo-Karelian]. Helsinki: SKS.
- Kuusi, Matti, 1972: Towards an International Type-System of Proverbs. *Proverbium* 19.
- Kuusi, Matti, 1970a: How can a Type-Index of International Proverbs be outlined? An Experiment and Five Questions. Proverbium 15, 473-476.
- Kuusi, Matti, 1970b: Ovambo proverbs with African parallels. Helsinki: Finnish Academy of Science and Letters (Folklore Fellows Communications, 208).
- Kuusi, Matti, 1966: Ein Vorschlag für Terminologie der parömologischen Strukturanalyse. *Proverbium* 5, 97–104.
- Kuusi, Matti, 1953: Vanhan Kansan Sananlaskuviisaus [Proverb wisdom of the old folks]. Helsinki: WSOY.
- Kuusi, Matti; Krikmann, Arvo; Joalaid, Marje; Kokare, Elsa; Laukkanen, Kari; Leino, Pentti; Mälk, Vaina; Sarv, Ingrid, 1985: Proverbia Septentrionalia. 900 Balto-Finnic Proverb-Types with Russian, Baltic, German and Scandinavian Parallels. Helsinki: Academia Scientiarum Fennica (Folklore Fellows Communications, 236).

- Lauhakangas, Outi, 2023: Matti Kuusi's Typology in the Light of Contemporary Use of Proverbs. In: Kotova, Marina Y.; Lauhakangas, Outi (eds.), *Proverbs Are Never Neutral*. Palgrave Macmillan, Cham. DOI: https://doi.org/10.1007/978-3-031-32646-2 3.
- Lauhakangas, Outi, 2021: Better Familiar Bad than Unfamiliar Good. Re-evaluation of Common values by Proverb Use. In: Szerszunowicz, Joanna (ed.), *Reproducibility of multiword expressions in paremiological and linguo-cultural studies*. University of Bialystok Publishing House (Intercontinental Dialogue on Phraseology, 10), 159–174.
- Lauhakangas, Outi, 2004: *Puheesta ihminen tunnetaan. Sananlaskujen funktiot sosiaalisessa vuorovaikutuksessa* [A man is known by his words. The functions of proverbs in social interaction]. Helsinki: The Finnish Literature Society.
- Lauhakangas, Outi, 2001: *The Matti Kuusi International Type System of Proverbs*. Helsinki: Academia Scientiarum Fennica (Folklore Fellows Communications, 275).
- Mac Coinnigh, Marcas, 2014: Structural aspects of proverbs. In: Hrisztova-Gotthardt, Hrisztalina; Aleksa Varga, Melita (eds.), *Introduction to Paremiology. A comprehensive guide to proverbs studies*. Warsaw, Berlin: De Gruyter, 112–132.
- Mieder, Wolfgang, 2012: "Think outside the box": Origin, Nature, and Meaning of Modern Anglo-American Proverbs. *Proverbium: Yearbook of International Proverb Scholarship* 29, 137–196.
- Mitrevski, George, 2007: On the Classification of Macedonian Proverbs in an Electronic Database. XIV International Congress of Slavists.
- Muhedeen, Bekhal Latif; Ahmed, Shayma Mahmud, 2023: Pragmatic Study of Overstatement in Kurdish Proverbs. *Journal of University of Raparin*, 45–71. DOI: http://dx.doi.org/10.26750/Vol(10).No(3).Paper3.
- Mukařovský, Jan, 1983 [1971]: The Proverb as Part of Context. Selected passages from Mukařovský

 Penfield, Joyce, *Communicating with quotes: The Igbo case*. Appendix B. Westport

 CT: Greenwood Press, 96–104.
- Noy, Natasha F.; McGuinness, Deborah L., 2001: *Ontology Development 101: A Guide to Creating Your First Ontology*. Stanford Knowledge Systems Laboratory. Online: http://protege.stanford.edu/publications/ontology_development/ontology_101.pdf.
- Permyakov, Grigory, 1979 [1970]: From proverb to folk-tale. Moscow.
- Permyakov, Grigory, 1968 [1961]: Izbrannye poslovicy i pogovorki narodov vostoka. Moskva.
- Villers, Damien, 2022: What makes a good proverb? On the birth and propagation of proverbs. Lexis. Journal in English Lexicology 19. DOI: https://doi.org/10.4000/lexis.6383.
- Zhitomirsky-Geffe, Maayan; Prebor, Gila; Bloch, Orna, 2017: Improving proverb search and retrieval with a generic multidimensional ontology. *Jasist (Journal of Association for Information Science and Technology)* 68/1, 141–153.