

The APFT Content Code System

Manual and Software

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Preface by David Zeitlyn

New research calls for new ways of exploring that research. The coding system published here has been developed as part of the *Avenir des Peuples des Forêts Tropicales* (APFT) project. This is an innovative research programme funded by the EEC (DG VIII) in which collaborative and comparative research is to be undertaken in tropical rainforest areas on three different continents. This is innovative in that never before has anthropological research been so closely linked to ongoing research in allied subjects while at the same time being undertaken on a near global scale. More than that, the project outline stresses the comparative dimension and the possible benefits that this may have for policy makers in the EU. So while being empirically and theoretically innovative the program has a practical side as well - issues to do with Tropical Rainforests and their inhabitants are urgent and the results of research on them is relevant to important decisions being made by major players in the world economy such as the European Commission.

Yet the APFT researchers have to concentrate of their own particular field research. How then can the comparative dimension be achieved? In part this will occur through post-fieldwork meetings at which researchers from the Pacific and Caribbean will exchange views with their colleagues working in Africa. But added to this and (we hope) giving the discussions a new, sharper character will be the role of this coding scheme which will permit indexes of all APFT research to be searched. Soon researcher can easily discover that another colleague has data on a specific point. And the codes themselves will help provide a common vocabulary for the comparative exercise.

In establishing the coding scheme the point of view of the researcher in the field was paramount. Traditional thesaurus based schemes such as that of the HRAF require both a long period of training and are time intensive in use. They are thus not well suited for use in the field by a researcher who is concentrating on the research at hand.

The content codes system described below aims to be both easy to use and to capture more of the content of the work being indexed by including different types of indexes. So the researcher uses their own keywords (or threads) for important features of the research. They also write simple short (single sentence) summaries of the notes. These complement the content codes themselves which unlike standard thesaurus systems include a grammar of actions - this gives the codes the ability to represent key features of the events described in a relatively simple, basic vocabulary: a domestic argument reduces to a senior man ordering a junior woman, a field boundary dispute may be a two women of equal seniority arguing about a tree!

The comparative dimension now beckons.

The publication of the content code system puts it in the public domain and we hope it will be widely used by field researchers not just so that the content of their research data can be represented in a uniform manner but also as a fieldwork tool in itself: the work of indexing ones own material alerts the researcher to unfinished business and to issues that are worthy of more research.

Introduction

The APFT Content Code System (ACCS) is a tool for classifying units of field data, mainly field notes, but including photographs, video and sound recordings and artefacts. In the past this kind of classification has been based on hierarchical taxonomic systems, using a controlled vocabulary in the form of a thesaurus. This is a good way to classify content, but has several disadvantages in the context of projects with diverse research interests and a considerable amount of explorative research. The main problem is the complexity of the controlled vocabulary, the extent of training necessary to correctly use the controlled vocabulary, and the amount of documentation necessary to support the vocabulary. In addition, these systems are designed more for a different sort of material than fieldnotes. There is no way, for example, to easily indicate actors or actions in the conventional systems.

We examined the only general system developed to date for ethnographic material, the *Outline of Cultural Materials* [Murdock 1957, HRAF 1965-; hereafter OCM], and found that it was poorly defined as a hierarchical classifier system [Fischer & Kortendick 1996a], while suffering from all the limitations of that genre.

In analyzing why the OCM worked as well as it did in practice, we found that it was principally because of the way it was used, rather than the system itself. The OCM consists mainly of familiar categories to anthropologists, the principal users, and most ethnographic sections were coded with many unrelated categories that tended to correlate well with things of interest to anthropologists. So, while the hierarchical structure of the codes is poorly adhered to, the domains covered by the codes overlap widely. Only because of user expertise can the OCM be used to locate ethnographic examples that tend to be useful.

The current system is based on research conducted by Michael Fischer between 1985 and 1994 on automatic coding of large scale textual databases and formal representation of ethnographic fieldnotes, research on comparison of manual and machine coding of text corpora by Oliver Kortendick between 1988 and 1995, and a manual by Phillip Bock [Bock 1986] on formally representing ethnographic data.

The object in the present system is to provide additional information that makes it possible to locate notes and note segments, and related material (photographs, drawings, artefacts, tapes etc.) that correspond to a topic that some user of the data might want to retrieve. Normally this is done by simple keyword search (or content terms, i.e. words that appear in the note material), but this is highly unsatisfactory. Keyword systems rely on the specific usage of terms indicating a subject, and require substantial familiarity with the topical material to use efficiently. Even then much unrelated material is located, and relevant material is missed. If there are many different producers of material in several languages, problems with uniformity can come up. In a case where notes may be in English, French or Spanish, and perhaps other languages as well, keywords are even less useful.

The ACCS aims to use relatively few terms that are quite general, but which cut across a number of substantive categories. As you will quickly learn, the vocabulary itself is quite reduced, and in and of itself would be quite difficult to use to phrase meaningful searches of the material. However, it is designed to be used in a different manner. Together with the coding for the note, the researcher will write an abstract of 20 to 250 words in their native language which describes the note, possibly include note

selections.

Instead of forcing the user of the notes to use the ACCS terms as search terms, other terms that appear in the note abstracts can be also used, like a content search. When the note abstracts and classifier terms are entered in the computer, logical correlations are made between the terms entered and the words in the abstract. Over many note abstracts one can calculate statistics which provide a means to translate queries made in natural language into searches for particular sets of terms, regardless of the language used for the search and the language the note abstract is written in (so long as the languages are languages that were used by researchers in writing abstracts).

APFT Content Code System

The basic goal in developing the system was to have as few classifier terms as possible (we initially wanted 64-100 terms ... we have 180 main terms), organised into categories that correspond to major domains of interest to anthropologists and the users of anthropological data.

These categories are not hierarchically arranged, and indeed are designed to be meaningfully grouped together to form clauses. There are three types of category, substantive, grammatical and pragmatic.

The substantive categories are: *Time* , *Place* , *Culture* , *Society* , *Ecology* , *Climate* , *Economy* , *Jural* , *Material* , *Technology* . The grammatical categories are *Agents* , *Prepositions* , *Role Attributes* , *Patients* . The pragmatic categories are *Meta Context* and *Ethnographic Intent* . There is an additional category called Threads, to which the coder may add any terms they find necessary.

This organisation of terms into categories are not intended to be hierarchical categories, but simply an aid to denoting and locating terms. It is the terms themselves (including the terms that are the category labels) that are important. In coding a note abstract you use as few or as many of these terms as you find appropriate, either as a single term, or organised into a clause of terms, or several clauses of terms.

1. Coding and indexing

Coding and indexing are two terms not easily to separate and are often confused. In fact they have some things in common: You probably met an indexing system if you ever visited a library. Librarians use index-lists for indexing books. If you are interested in a country like ³Tanzania² you might find it useful to have a catalog-system that sorts all available books by the term ³Africa². You might find it even more useful to be able to find all books about ³Tanzania². If your interests are even more specific, you will find a very detailed index-system helpful that covers with its terms exactly your interests. Unfortunately, other people have other interests than you. So a very sophisticated, detailed index-system would have a unique term for each and every book - thus enabling you to find the very book you are interested in, but making the catalog-system obsolete. Therefore index-systems have to compromise and find the right balance between personal interests and a general order.

Coding means indexing but with an additional quality. The indexes are designated with values, indicating emphasis, less or more importance.

1.1. Category

By category we mean a discrete group of events or features, in this specific contexts, the ACCS terms. You will notice, that some of the terms are numbered, some are marked by small letters. This marking by numbers and letters is arbitrarily, and helps us to process your data. It is important, however, for your work to use the numbered and lettered terms to code your abstracts.

1.2. Term

You will notice, that there are different kinds of terms provided in some of the categories. Look for example at category G³Economy². It holds 18 terms that can be used for the description of different economical activities and four terms (a through d) that can be and should be used for a further qualification of these activities.

There are only two general terms that apply to each and every category and can be used to further qualification of terms: the plus (+) and the minus (-) sign. These two are useful if you want to indicate the relative importance or unimportance of terms within a clause.

Examples of valid terms

A Time
 A1 Present
 A1a Present event
 Adg long time permitted
 A1ah Present event obliged
 A1:2 Present and past
 A1g:2h permitted Present and obliged Past

1.3. Clause

A clause is a sequence of terms, marked by special characters and with a reference to a text segment above it. Please keep two things in mind when you start to code your abstracts by using a combination of terms and writing a clause: The clause must always be marked by a special character which you may not use anywhere else. For this purpose we reserved the sequence <*> to mark the beginning of a clause and the sequence *> to mark the end of a clause.

The angle brackets and the star may not be used in your abstract except in your clauses!

You may have more than one clause to describe the content of your abstract, indeed this is likely. Keep the following rules for formulating clauses in mind:

- You need not include terms unless you wish.
- Terms need not to be in a particular order.
- It is possible to use parts of a term group, e.g. E, Ea, E4 or E4a.
- You may use a category more than once in a clause.
- You should always indicate a value for K and L. (Ethnographic Intent and Meta Context)
- K and L can appear in their own clause, if you wish, e.g. <*> K2, L3 >*

1.4. Thread

You should create your own list of keywords, called threads. Threads will emerge from your research and interest, like marriage, gossip. You should create a list of these, and preferably number them, using the number in the clause, rather than the words, though the words can be used. Write your threads on paper or in a word processor file and number them in sequence.

Threads always appear in their own clause, e.g.

<* T marriage *>

or at the very end of the main clauses, e.g.

<* ..., T marriage *>

Preferred would be, assuming that marriage is thread 5

<* T5 *>

2. Writing an abstract

The APFT Content Code System is based on two kinds of entry based on a field note or other piece of field data, such as a photograph or video tape segment - a note abstract and a set of terms describing the note.

The abstract is written in succinct and plain language, describing the main points of a note segment. The length of the abstract depends on the material, but should be as short as possible given the material. Detail should be kept to as basic a level as possible, since the basic idea of the system is to minimize the amount of time spent coding in the field. A quasi-natural division of notes is the daily or situational entry. The abstract should be a summary of the daily entry. We think of it as a means of communication with our colleagues: What are the essential happenings on that very day? What is, or might be important for others to know? There will be days where little to nothing important happens, but even events, one might not regard as important at the moment, might become important before the background of later events or might be important hints for others.

For example consider the following simple note segment:

N: 45
 P: Rakahanga village
 D: 15/7/95
 T: AM
 K: pearl, lagoon, resources
 W: p(Taunga, Temu)

p(Temu): They are experiment with putting seeded shells in the lagoon - got 200 pearls In harvest - Not sold yet - not enough to spawn new shells - p(Taunga) reckons that they can get about 200000 shells in lagoon. At current prices at 200000 shells that is 5-8 Million dollars p.a. at 66000 shells x 2 seedings/harvests per annum Is 18000 to 30000 per capita pa.

This is the fieldnote format suggested by Michael Fischer. The note begins with a clear separator '---' and has a header, N: [note number], P: [place], D: [date], T: [time], K: [keywords], W: [who]. In this instance

the keywords were created by the fieldworker, and may be quite idiosyncratic, and added at a later time when the notes are processed and analyzed. The p(X) label is a convention used to identify names, making it easier to release the notes publicly later without names. A similar function, l(X) may be used to identify places that you may later want to disguise.

When producing abstracts, a header like the above should be created for each note, reproduced if you already included one in your own notes.

In the case of a condensed note such as this one (a more complex example is given later), the abstracts are basically simple divisions of the note:

N: 45
 P: Rakahanga village
 D: 15/7/95
 T: AM
 K: pearl, lagoon, resources
 W: p(Taunga, Temu)

p(Temu): They [the island council] are experiment with putting seeded shells [from Manihiki] in the lagoon - got 200 pearls In harvest - Not sold yet - not enough to spawn new shells -

p(Taunga) reckons that they can get about 200000 shells in lagoon [I reckon he is optimistic].

At current prices at 200000 shells that is 5-8 Million dollars p.a. at 66000 shells x 2 seedings/harvests per annum Is 18000 to 30000 [NZ\$] per capita pa.[my rough calculations based on 60-80% retention of the seed by shells, and 60-75 dollars average per pearl]

Basically the divisions are made where main themes vary. It is important that the different divisions of a note segment appear together, since this is a help later for making correlations.

Material in '[' brackets was added to the abstract to make the material comprehensible out of context.

The names Temu and Taunga can eventually be replaced with id numbers, which identifies informants in the note, but avoids making the names public. This is not always necessary, but rarely is it important for outsiders to know the names.

Although we agreed that writing an abstract can mean that you summarize the events of one day in a single sentence, you should always keep in mind that information that you omit is non-existent for other people. So writing an abstract is a compromise between sending us your complete notes and nothing.

2.1. Coding with the ACCS

2.1.1. Expected difficulties

We expect you to have the most problems with the application of non-discrete categories and terms.

Although we tried to write ACCS as a complete new tool of coding redundant data, its roots derive from classical theory and literature about the construction and features of coding and indexing systems.

Within these system we always differentiate between discrete and non-discrete codes. See for example category M:Agents, term 1 ³woman². We call this a discrete term, because it is pretty obvious, observable and exact. Little intercultural variation is to be expected when using or applying this term. The same is valid for I:Material, term 1 ³wood².

On the other hand we have terms and categories that actually involve intercultural or even intracultural variation like C: Culture, term 1 ³symbolic expression², or term 7, ³knowledge system². These are non-discrete terms which require your judgement, are not easy to define, or where anthropology even never has found a common sense based definition (like D: Society, term 9 ³marriage²).

In Section 3 we give you guidance by defining each term, including a list of indications and prototype examples. Nevertheless the actual task of coding and responsibility with regard to your fellow scientists is yours.

2.1.2. A basic example

After constructing the abstract, each section of the note segment must be coded using the APFT Coding terms, which are in Section 3 of this document, and listed on a single reference sheet at the end of this manual

The intent is to provide enough information to identify the content, type and intent of the note sections related in the abstracts. Not every category is used, only the ones you think useful. In general though it is useful to always include either K or L (or both) and your own threads as well.

Let's begin with a very simple example:

Note 1: The dog bites the man.

A first clause can be very quickly formulated:

<* M8,N9, O6,P2 *>

i.e. Term 8 from the ³Agents-category M² (animal)

Term 9 from the ³Preposition-category N² (Æ)

Term 6 from the ³Role Attribute-category O² (hostility)

Term 2 from the ³Patients-category P² (man)

This could be spelt out as:

An act of hostility or aggression of an animal towards a male person.

This would roughly describe the content of this single sentence. Note that as we agreed that the terms need not be in an alphabetical order, this clause could also represent the content:

The man is bitten by the dog.

Also, an essential part is missing, namely categories K and L, which have to have always an indicated value.

An improved version of the clause is therefore:

<* M8,N9, O6, P2, K1, L1b *>

where now an ³Ethnographic Intent² is added, namely ³description of² and a ³Meta Context², namely an ³observed² ³event² and would be spelt out as:

A description of an observed event of hostility of an animal against a male person.

The ³Time²-category could be important in this case also. It could be a singular event, like a man that is bitten by a dog once (e.g. you observed this on the street on a particular day), or it could be, say, the mailman, who is bitten by a particular dog every morning on his daily delivery trip.

In the first case, we would add:

<* M8, N9, O6,P2,K1,L1b,A1a *>

to indicate that this was indeed an event that only occurred once.

Read: A description of a present observed event of hostility of an animal against a male person.

In the second case (assume that every morning you see this happening while having breakfast on your veranda), we would add:

<* M8, N9, O6,P2,K1,L1b,A4c *>

Spell: A description of a present cyclical observed event of hostility of an animal against a male person.

to indicate that this event happens repeatedly.

2.2.3. A more complex example

As you might have noticed the reduction of information in the above example is not very high (14 characters versus the original 17). The ACCS develops its whole strength when you use it to code segments of text i.e. abstracts.

For the example we used for demonstrating how to write abstracts, one could code it as:

N: 45
 P: Rakahanga village
 D: 15/7/95
 T: AM
 K: pearl, lagoon, resources
 W: p(Taunga, Temu)

p(Temu): They [the island council] are experimenting with putting seeded shells [from Manihiki] in the lagoon - got 200 pearls In harvest - Not sold yet - not enough to spawn new shells -

<* K1, L2a, A1b, M13, B9:7, E9:13b, G1:15, I2g, T pearl, lagoon*>

p(Taunga) reckons that they can get about 200000 shells in lagoon [I reckon he is optimistic].

<* K1, L10a, A3, M13, B9:7, E9:13b, G1:15, I2, T pearl, lagoon*>

At current prices at 200000 shells that is 5-8 Million dollars p.a. at 66000 shells x 2 seedings/harvests per annum Is 18000 to 30000 per capita pa.[my rough calculations based on 60-80% retention of the seed by shells, and 60-75 dollars average per pearl]

<* K6, L10, A3, B9:7, E9:13b, G1:15:2, I2, T pearl, lagoon*>

The classifiers are included in <* and *> brackets following the abstract. Everything in a <* *> pair is a clause. The first clause is:

<* K1, L2a, A1b, M13, B9:7, E9:13b, G1:15, I2g, T pearl, lagoon*>

Looking the terms up by category (A-T) we find:

K1 - Ethnographic Intent = Description of:

L2a - Meta Context = Behaviour (from interview)

A1b - Time = present + process

M13 - Agent = government

B9:7 - Place = Lake+ Sea

E9:13b Ecology = water + animals + cultivated

G1:15 Economy = production + resources

I2g Material = animal + imported

T: pearl, lagoon = threads important to the specific fieldwork being done.

Threads are created by the fieldworker. In this case they are the same as the keywords, except for resources which is explicit in the coding. When possible use the codes and not your own threads, threads should contain extra themes that are location and research specific.

The above spelt out is:

A description of a present behavioural process undertaken by government relating to production and access to imported water animal resources in a lake/sea environment, specifically pearls and lagoon.

The next clause codes as:

<* K1, L10a, A3, M13, B9:7, E9:13b, G1:15, I2, T pearl, lagoon*>

K1 - Ethnographic Intent = Description of:

L10a - Meta Context = Prediction (from interview)

A3 - Time = future

M13 - Agent = government

B9:7 - Place = Lake+ Sea

E9:13b Ecology = water + animals + cultivated

G1:15 Economy = production + resources

I2 Material = animal

T: pearl, lagoon = threads important to the specific fieldwork being done.

Note that the description is similar to the previous one. The main differences is this is a prediction of capacity, relating to the same topics as the previous section. This is common, and if you are using a word processor, you can copy and edit the previous clause.

Likewise the third coding:

<* K6, L10, A3, B9:7, E9:13b, G1:15:2, I2, T pearl, lagoon*>

K6 - Ethnographic Intent = Summary of:

L10 - Meta Context = Prediction

A3 - Time = future

B9:7 - Place = Lake+ Sea

E9:13b Ecology = water + animals + cultivated

G1:15:2 Economy = production + resources + distribution

I2 Material = animal

T: pearl, lagoon = threads important to the specific fieldwork being done.

Many other codings other than the one we used are possible. However it is likely that you would use many of the same terms in your clause. Note that we did not attempt to capture every detail in the codings, just a general pointer to its content and type.

For example in the first abstract we included two bits of information, that the shells were not sold yet and there were not enough shells in the lagoon to enable spawning.

p(Temu): They [the island council] are experiment with putting seeded shells [from Manihiki] in the lagoon - got 200 pearls in harvest - Not sold yet - not enough to spawn new shells -

<* K1, L2a, A1b, M13, B9:7, E9:13b, G1:15, I2g, T pearl, lagoon*>

These are not coded because in this context it was regarded too fine a detail to code, but it is useful information to whoever retrieves the note, and they can use this as the basis to find out about spawning if they so wish.

2.2.4. More Advanced example

Let us look at this abstract of a recent field trip:

N: 10

P: Krisa

D: 09/06/96

T: Morning

K: local Politics, conflict, religion

W: p(Paul), p(Mike)

It is a Sunday and in their small church the villagers hold a mess. Seems that they are mainly catholics, and right at the moment this is the only thing that we have in common... I do not speak their language nor pidgin, but I know the rites of course. The only man I can communicate with at the moment is the Church Councillor. Apparently he makes an announcement with is related to the research - alas, I do not understand it.

We agree that the interviews should start tomorrow. One of the students who immediately found wantoks in the village comes with the newest information about the political situation. People do not trust the Village Councillor - quite strange, for he is the only one they elect

We would suppose the following coding for the first paragraph:

<* A1ac,B10a,C4a,D1g,K1,L1b,M7, N9, O8 *>

and

<* A1,B10a,D6g,K1,La,M7, N9, O7,P2c *>

for the second.

We could add a thread to the second paragraph (mainly because this theme occurs more often in the notes later on), e.g. ³Local Politics². Let us assume, that this is our first thread, in this case we would label it T1 and add it to the clause.

<* A1,B10a,D6g,K1,La,M7, N9, O7,P2c,T1 *>

Let us turn back to the example and explain in detail what rational let us build up these two clauses. The elements of the first clause are:

A1ac (Time: Present, event, cyclical)
 B10a (Place: Coastal, village)
 C4a (Culture: Religion, performance)
 D1g (Society: Group, local)
 K1 (Ethnographic Intent: Description of)
 L1b (Meta Context: Event, observation)
 M7 (Agents: Group)
 N9 (Prepositions: Æ)
 O8 (Role Attributes: Communicating)

Which could be read as:

A description of an observed present but cyclical occurring event, in a coastal village, that involves the religious performance of a local group as an act of communication.

The two ordering principles of the ACCS become clear:

1. It splits up the content of the text segment into categorized elements (separated by commas).
2. By combining two or more of these elements text becomes - under diverse aspects - retrievable.

If for example we would search the contents of a databank for text segments that refer to acts of communication of groups (O8 by D1g) we would find that very segment. By adding more elements in the retrieval we would further specify the segments with a specific content.

As you might notice, the ACCS allows you to put even more information than the actual abstract contains, into a clause. See for example the combination L1b by C4a: We have a more detailed description of this

happening (a mass) in the original field entry - but preferred not to take it into the abstract. The information, however, is not lost. Any researcher, who is in particular interested in that event might contact the author to get more information, if he is interested. So you need not to worry about the confidentiality of your notes and data: All you deliver to us is an information about an information i.e. data. Not the actual notes unless you elect to include selections.

Let us have a look at the second clause which is made up from the following elements:

A1 (Time: Present)
 B10a (Place: Coastal, village)
 D6g (Society: Political, local)
 K1 (Ethnographic Intent: Description of)
 La (Meta Context: interview)
 M7 (Agents: Group)
 N9 (Prepositions: Æ)
 O7 (Role Attributes: Hostility)
 P2c (Patient: Man, external)

Spelt out:

A description of a present act of hostility of a group against a man outside that group, involving local politics, in a coastal village.

Obviously the two clauses have a few things in common, which is not surprising, for they describe abstracts that are based on a one-day entry. Nevertheless, the ACCS is perfectly in state to build up clauses that are distinct.

On the most basic level 8 categories are the same: (A, B, D, K, L, M, N, O). On a second level (where the actual terms are positioned), 5 out of 8 elements are the same (A1, B10, K1, N9, M7). On the highest level of coding, where combinations of terms occur, 4 out of 8 elements remain the same (B10a, K1, M7, N9). So the two clauses have enough elements in common to place and identify them in same context (a running field entry, which in itself is embedded in a context, namely your research), on the other hand, enough elements are different to identify an individual abstract.

2.2.5. Another example

N: 75
 P: Tukao village
 D: 26/7/95
 T: Evening
 K: land dispute, government, pearl farming, resources
 W: p(Sam, Daniel)

Went to see p(Mark). He was not there due to the generator breaking down. However p(Sam) and p(Daniel) came by who are his [p(Mark)] sister's sons. She died last week on her 70th birthday. They were pretty agitated because of a land dispute with an affinal relative [MMH(2)] who has the house in front of them relative to the lagoon side. He has no blood right to the land because he was the second husband of p(Sam)'s MM. He has however lived

on the land for such a long time that he feels he has tenure rights. p(Sam) and family are irritated because he blocked rebuilding the family home on its original site. He retaliated by blocking their access to the lagoon, which is a very important issue here. They now just want him off the land altogether. This is up to the Island Council, though current rule and custom is in p(Sam)'s favour. However tenure is being seen by the IC as a factor as well. p(Sam) sees his position as the only one and the position of the IC as cowardly. Particularly The mayor, p(Sampson). He claims the Mayor (talking to p(Daniel) now) indicated he agreed with their position, but on talk to the old man wants a compromise where the old man continues to live on the land but must provide access.

p(Sam) came over in 1988 thinking pearls would be instant wealth. He learned different.

He had worked In NZ for 10 years (?) before coming. His wife p(Nga) came with him. He indicated he had lost his job In NZ. He is a draftsman by trade.

Very disgruntled with Island attitudes.

He tried setting up a pearl farmers' association several years back with no success. He said that the early farmers did not want to share their knowledge, Which because they had received aid they had an obligation to. They are starting to do so now, and have organized a Pearl Farmers Association.

This might be abstracted in detail as:

N: 75

P: Tukao village

D: 26/7/95

T: Evening

K: land dispute, government, pearl farming, resources

W: p(Sam) and p(Daniel): [p(Mark)'s sister's sons].

p(Sam): Land dispute with an affinal relative [MMH(2)] who has the house adjoining. He has no blood right to the land. He has lived on the land a long time and feels he has tenure rights. He blocked rebuilding the family home on its original site. He [physically] blocked their access to the lagoon [with a wall], a very important issue here. They now want him off the land altogether. This is up to the Island Council, and current rule and custom is in p(Sam)'s favour.

Tenure is considered by the IC as a factor as well. p(Sam) sees his position as the only one and the position of the Island Council and Mayor as cowardly.

He claims the Mayor (talking to p(Daniel) now) indicated he agreed with their position, but on talk to the old man wants a compromise where the old man continues to live on the land but must provide access.

<* K5:1, L1d, M7, N9, O7, P2d, A1a, Ba, D10d, G9, H6:9ad *>

<* K5:1, L1d, M13, P7, A1a, Ba, D1c, G9, H6:4d *>

p(Sam) came over in 1988 thinking pearls would be instant wealth. He learned different.

He had worked In NZ for 10 years (?) before coming. His wife p(Nga) came with him.

Very disgruntled with Island attitudes. He tried setting up a pearl farmers' association several years back with no success. He said that the early farmers did not want to share their knowledge, which because they had received aid they had an obligation to. They are starting to do so now, and have organized a Pearl Farmers Association.

<* K1, L3a, M7, N7, O10, P7d, A2:1, Dcd, E10, G1:15, J10, I2, J8i, T pearl *>

The coding for the first abstract could be stated as

<* K5:1, L1d, M7, N9, O7, P2d, A1a, Ba, D10d, G9, H6:9ad *>

<* K5:1, L1d, M13, P7, A1a, Ba, D1c, G9, H6:4d *>

Here we used two clauses to capture two ideas in the text. Firstly

An example/description of an event related via conversation about a group's hostility to a man outside the group, in the village, involving kinship and competition about land negotiation and arbitration.

Note that category B - place - uses the modifier b - village - with no number. Likewise if you thought that Society was an issue in a note but didn't want to specify, a simple D coding would be fine.

The second clause could be read:

An example/description of an event related via conversation about government actions to the group, in the village, involving kinship and cooperation in land negotiation and arbitration.

The second abstract coding could translate as

<* K1, L3a, M7, N7, O10, P7d, A2:1, Ddc, E10, G1:15, I2, J8i, H10, T pearl *>

A description derived from interview about group exchange of information to another group in the past and present involving competition and cooperation, relating to resources and production of animal material and extractive technology, and obligations.

Obviously not every note can be dealt with in such detail, although some will require this much. A shorter abstracted version could be:

N: 75

P: Tukao village

D: 26/7/95

T: Evening

K: land dispute, government, pearl farming, resources

W: p(Sam) and p(Daniel): [p(Mark)'s sister's sons].

p(Sam): Land dispute with an affinal relative [MMH(2)] who has no blood right to land occupied, but who feels he has tenure rights. Current rule and custom is in p(Sam)'s favour.

Tenure is considered by the IC as a factor. IC wants a compromise where the old man continues to live on the land but must provide access.

<* K5:1, L1d, M7, O7, P2d,A1a,Ba,D10d,G9,H6:9ad *>

<* K5:1, L1d, M13, P7, A1a, Ba, D1c, G9, H6:4d *>

p(Sam) returned from New Zealand in 1988 thinking pearls would be instant wealth. He learned different.

Very disgruntled with Island attitudes. He said that the early farmers did not want to share their knowledge, which because they had received aid they had an obligation to. They are starting to do so now, and have organized a Pearl Farmers Association.

<* K1, L3a, M7, N7, O10, P7, A2:1, Dcd, E10, G1:15, H10, I2, J8i, T pearl *>

Note that the code clause does not change, just the abstract. In general, since you will use these abstracts as well, is to provide more detail on issues you think are important to yourself and potential users, and less detail otherwise. If you are using a word-processor, you may in some cases simply want to include verbatim text from the note as the abstract, with a few inclusions in '['] to add detail, and removing some extraneous detail. This is basically how we abstracted the detailed version of the above note, which was quicker than producing the shorter abstract that followed. However, note text does usually require some editing in either case.

Also, the example clauses are pretty complete. You can leave a few terms out, or emphasize others to include information about details left out, as you feel fit. The coding system is designed to be robust with respect to coder differences. The important thing is to try to capture the general form of the note, without trying to get every detail in.

Many notes are rather simpler to deal with:

N: 25

P: Tukao village

D: 8/7/95

T: Afternoon

K: pigs, gender, coconut

Went along the coastal road to The inland road where the pigs are kept. This time there were a few people around tending the pigs. The first I saw was a young man who was not very friendly. He smiled but was not happy with my presence I thought. He was cutting the coconuts and then mixing them with slop.

The next person was a older woman hauling coconuts In a wheelbarrow over to her pigs.

<# V: small shot of her is on the video Manihiki I at about 35 minutes. #>

Next person was p(Joseph) (in the previous note) who was coming down to do some business cutting the coconuts. He had a machete-and I asked him what it was called. He said ³In NZ we call it a machete-here they just call it a big knife²

which we might abstract and code as follows:

N: 25
 P: Tukao village
 D: 8/7/95
 T: Afternoon
 K: pigs, gender, coconut

Pigs are mostly kept inland away from the village. [A man] was cutting the coconuts and then mixing them with slop.

<* K1, Lb, M7, N9, O6, P8, E13, T pig *>

An older woman was hauling coconuts in a wheelbarrow to her pigs.

<# V: small shot of her is on the video Manihiki I at about 35 minutes. #>

<* K1, Lb, M1, N9, O6, P8, D8, E13, J10h, T pig *>

p(Joseph) there to cut some coconuts. He had a machete-and I asked him what it was called. He said ³In NZ we call it a machéte-here they just call it a big knife² <# P: QT of p(Joseph) with 'Big Knife' in Manihiki 14/7/95 #>

<* K5, L1d, Jh*>

Note the <# #> which contain video and photo references. If we had already covered in earlier notes where pigs are kept, that coconuts are fed to pigs, or that women feed pigs, these sections would be dropped entirely. The last one we would leave as a good example of the ethnographer's folly.

3. Definitions

A: Time

1. : *Present*

Everything now existing or in progress (happening): direct observations, statements, explanations.

2. : *Past*

Everything having existed or taken place in a period before the researcher is present. Stories, reports, chronicles.

3. : *Future*

Everything that will happen later on, in the researchers presence or absence. Plans, intentions.

4. : *Seasonal*

Activities that are bound to periodically occurring natural changes in environment, or special social or cultural activities within one year.

5. : *Generational*

Activities that are bound to a sequential order of kin-related individual lives.

6. : *Ancient*

Events that lay far beyond an individuals lifetime and experience in the past.

7. : *Mythic*

Non-chronological time (i.e. time concepts that are not based on the chronos-concept of a sequential order of events).

a: event

A finite, time limited activity that is context framed or based. The fundamental entity of observed physical reality represented by a point designated by three coordinates of place and one of time in the space-time continuum.

b: process

A context framed series of activities converging to an end.

c: cyclical

A course or series of events or operations that recur regularly and usually lead back to the starting point.

d: long

Use ³long² to express a subjective reported or observed length of events, processes and cycles.

e: short

Use ³short² to express a subjective reported or observed length of events, processes and cycles.

f: reported

Use ³reported² for formal records of the proceedings of a meeting or session.

g: permitted

Use permitted to describe events, processes and cycles that refer to allowed actions.

h: obliged

Use obliged to describe events, processes and cycles that refer to constrained actions.

i: possibly

Use possibly to describe events, processes and cycles that refer to a range of actions.

B: Place

1. : *Forest*

An extensive tract larger than 1 hectare, where most of the organic material consists of trees and undergrowth, sometimes intermingled with pasture.

Indications: Forest, emic terms.

Examples: 40 kilometers from forest.

2. : *Plain*

Plain is an extensive area of level or rolling treeless country, larger than 1 hectare, where most of the organic material consists of grasses and small bushes.

Indications: Plain, emic terms.

Examples: People coming up with animals from plain decided to winter here. [...] Ramzi Bey owns land in about 6 villages of the Kayseri plain - worked by yarc {sharecropper}.

3. : *Mountain*

A natural elevation of the earth's surface rising more or less abruptly from the surrounding level, and attaining an altitude which, relatively to adjacent elevations, is impressive or notable.

Indications: Mountains, emic terms.

Examples: Glveren - fields extend 4 hours towards the mountains, iraz (1.5 hrs) is in a kind of pocket.

4. : *Highland*

Elevated or mountainous land.

Indications: Highlands, emic terms.

5. : *Valley*

An elongate depression of the earth's surface usually between ranges of hills or mountains.

Indications: Valley, emic terms.

Examples: Found Sosun - almost invisible from road because it is on another escarpment facing into a small valley.

6. : *River*

A natural stream of water of considerable volume flowing in a channel towards the sea, a lake, or another stream.

Indications: Rivers, emic terms, names.

Examples: Zamanli Su (from Pinarbaşı) runs south, forms boundary of the Nahiye with Taklar, runs into Seyhan River.

7. : *Sea*

A great body of salty water that covers much of the earth.

Indications: Oceans, sea, emic terms, specific names.

Examples: About 200 workers mostly Black Sea except for a few local villagers.

8. : *Lake*

A considerable inland body of standing water sufficiently large to form a geographical feature.

Indications: Lake, emic terms, specific names.

Examples: Very near the Keban lake - they hope for irrigation.

9. : *Coastal*

Land bordering great areas of water, seas or big lakes.

Indications: Coast, emic terms.

10. : *Swamp*

Wet spongy land saturated and sometimes partially or intermittently covered with water.

Indications: Swamp, emic terms.

Examples: Akarça - north on the way to Kanber, valley running down from Magaslik becomes wetter, springs, stream. Swampy, plenty of çayır {pasture}.

11. : *Island*

A piece of land completely surrounded by water.

Indications: Island, emic terms.

Examples: Town beautiful position, some nice rotting houses; castle; 2 thin islands now on a causeway.

12. : *Bay*

An inlet of the sea or other body of water usually smaller than a gulf.

Indications: Bay, emic terms.

These terms refer to human dwelling areas only.

a: village

A collection of dwelling houses and other buildings, forming a centre of habitation in a country or district.

Indications: Village, emic terms, specific names.

Examples: Finally he said Naksibendi {?} and said there had been (I think he said it) 70 people in the village.

b: town

An inhabited place larger and more regularly built than a village and having more complete and independent local government (>2000).

Indications: Town, emic terms, specific names.

Examples: He was also on about the contrast with vlg. In town you must have an income, you must work regularly. In vlg. ³tembellik² - ³if you do not plough today, plough tomorrow².

c: city

An inhabited place of greater size, population, or importance than a town or village (>15.000).

Indications: City, emic terms, specific names.

Examples: Ali Osman and Bilal - sÿvacilik is not much cop - they spend a lot of it in the city, - may easily have a month unemployed in which it all goes - not rich.

d: region

A large tract of land, a country, a more or less defined portion of the earth's surface (as distinguished by certain natural features, climatic conditions, a special fauna or flora, or the like).

Indications: Region, emic terms, specific names.

Examples: Ahmet - not organised by nahiyes {regions}, he has 25 villages - 20 days a month on the road, no transport.

The purpose of these modifiers is to precise the above mentioned terms.

e: place

The three-dimensional compass of a material object.

Indications: Name of the specific place, e.g. where research is conducted.

Examples: Sakaltutan

f: area

Particular extent of space or surface or one serving a special function.

Indications: Name of the specific area, e.g. where research is conducted.

**Examples: Baß
Ö@retmen - the difference
between Gesi and this area in marriage
customs ³eskiden² {gl: ancient} - Gesi
³Kayseriusul² - not an effect of new
ideas.**

g: near

At, within or to a short distance or time.

h: far

At or to a considerable distance in space.

i: universal

Including or covering all or a whole collectively or distributively without limit or exception.

C: Culture1. : *Symbolic expression*

Something that stands for or suggests something else by reason of relationship,

association, convention, or accidental resemblance; an act, sound, or object having cultural significance and the capacity to excite or objectify a response.

Indications: Symbol, emic terms.

Examples: Remarking on Margaret's illness; if long, they throw away the wife - no hoky-poky, described by appropriate symbol.

2. : *Recreation and leisure*

Recreation and leisure are specific western concepts of provided freedom by the cessation of activities; esp: time free from work or duties and by which certain activities are defined as "doing nothing", thus having a relaxing and restoring or refreshing function.

Indications: Recreation and leisure, emic terms.

Examples: His family makes carpets. He has a garden. He has a leisurely life -

3. : *Sport*

Sport is a form of ritualised competition between individuals, according to defined rules.

Indications: Kinds of sports, emic terms.

Examples: Wrestling. Various people think it a success.

4. : *Religion*

Religion is the belief in spiritual things.

Indications: Concepts of religion, emic terms, definitions.

**Examples: Íerife
Hanŷm gets out her mat and prays
apparently five times a day. She seems to know the
direction of Mecca, for she skews her
mat at about 30 degrees to the line of the hall.
On Sun. 17th April we came in when she
was at prayer. Yŷlmaz doesn't
seem to. Berin's mother, a more squalid old dear, also
left us to pray at 7.00 p.m. Anne{gl.
mother} prays on rising and at bed time, and once we
found her at it about 4 p.m.**

5. : *Ritual*

Ritual is a category of standardizes behaviour (custom) in which the relationship between the means and the end is not 'intrinsic'.

Indications: Specific events and terms.

Examples: A.O. (cf. 2/5) on arrival of bride, groom pours a bowl of money, fruit, etc. which household children have collected, over her head; and mother-in-law breaks a cömlek {gl: earthenware pot} on the doorstep.

6. : *Socialization*

Socialization is the process of learning to become a member of society, including both formal education and the informal induction into social roles.

Indications: Terms and references to socialization.

Examples: Hilmi - his son is going to plough, he says - and when I suggested educating his daughter they said what's the use.

7. : *Knowledge*

The whole thesaurus of human experiences, observed and reported, that are basis for choice and constraints of action.

Indications: Terms and references to knowledge.

Examples: Man was Konyali, (I think), wife Antalyali. Had done a course on transport in Germany - very impressed with technical [& organisational] knowledge given. He now arranges transport deals (³taßaron² he said).

8. : *Art*

The concept of art assumes a differentiation from crafts, non-functionality and beauty, as in the conscious use of skill, taste, and creative imagination in the production of aesthetic objects.

Indications: Terms and concepts.

9. : *Language*

Language is the unique verbal communications system employed by humans, [...] which is characterized, amongst other features, by its highly specialized and independent development, its complexity of symbolic use and its arbitrary nature.

Indications: Terms and references to language.

Examples: Kemal Kisi 22 years. Works as an office cleaner with a cleaning firm. Has one more year to pension. Children's Turkish is weak. Children doing well in Dutch education - language perfect.

10. : *Singing*

To produce musical tones by means of the voice; music being: the science or art of incorporating intelligible combinations of tones into a composition having structure and continuity.

Indications: Terms and references to singing.

11. : *Dancing*

To perform a rhythmic and patterned succession of bodily movements usually to music.

Indications: Terms and references to dancing.

These additional terms serve as modifiers.

a: performance

To conduct a ritual, religious ceremony, dance or song.

b: simulation

A simulation is the conduct or staging of an action under real-time circumstances, with the exception that the time of conduct is different than the simulated one.

c: public

Commonly shared.

d: private

Intended for or affecting a particular person.

D: Society

1. : *Group*

A group is a set of individuals of five or more with common identity, consciousness and interests.

Indications: Group, emic terms.

2. : *Individual*

An individual is a single human being.

Indications: Man, woman, emic terms.

Examples: Pattern of ba© on the hillside, divided up village lands - gather it broke down over ownership - payment etc. because the land belonged to the village

and not individuals.

3. : *Corporate*

A Corporation is a group which owns and controls significant property or resources.

Indications: Firm, working collective, emic terms.

4. : *Categorical*

Categorical means membership to an informal group without common aims.

Indications: Emic terms.

Examples: Nazife sat down with group of men in her house unconcerned.

5. : *Institutional*

A custom, practice, relationship, or behavioral pattern of importance in the life of a community or society.

Indications: Institution, emic terms.

Examples: {com: Except for villagers who are victims in specific cases, I think people are proud that they can subvert the formal State law and its institutions. No reticence or sense of shame.}

6. : *Political*

Political means the delegation of maintaining internal order, preservation of territorial limits and allocation of power and decision making to specific individuals or groups.

Indications: Forms of politics and political systems. Comments on that.

Examples: Politics. Newspapers full of the elections, with some indication that people are not all that interested.

7. : *Alliance*

An association to further the common interests of the members.

Indications: Kinship-, marriage alliances.

8. : *Gender*

Gender is a reference to socially and culturally determined differences in the behaviour, role and status of men and women.

Indications: Male, female.

Examples: Splendid speech about his wife & family, how Turks love their wives & families & a family is essential for a good life. Very clear gender roles.

9. : *Marriage*

The institution whereby men and women are joined in a special kind of social and legal dependence for the purpose of founding and maintaining a family.

Indications: see segment.

Examples: Although marriage legal, only 1% done without parental arranging - A.O. denied any changes and seemed to think it surprising I should expect any change. Legal for girl at 16, boy 18, without permission Procedure: Arkadaß {gl: friend} goes to a village and asks, a girl is suggested, negotiations opened. Or boy may like a girl and get his father to act. Boy's father takes 2 or 3 advisors, girl's father may call in relatives, to conduct bargaining.

10. : *Kinship*

The relations of affinity between persons of common ancestry.

Indications: Kinship terms, rules.

**Examples: Hala = Mother's sister [...]
Amme = Father's sister [...] Kaynata - kayẏn baba {gl: spouse's F}.**

11. : *Status*

Status is the individual's position in a social structure.

Indications: Status, emic terms.

Examples: Imam second in status to the Muhtar at meetings, above schoolmaster, richest man etc.

These terms serve as modifiers for the above terms.

a: high

b: low

c: cooperative

d: competitive

e: altruistic

f: external

g: local

E: Ecology

1. : *Health*

Health is the condition, in which human bodily and mental functions are not limited by any factors. On the other side, if these functions are limited by cultural defined causes, we speak of an absence of health or illness.

Indications: Reflections or considerations of health or illness. Causes and concepts of both.

Examples: Muhtar - bad hand, septic and swollen. Strongly advised to go to Doctor - went but not impressed - generally speaking didn't think much of doctors, or that it was worth bothering.

2. : *Reproduction*

The process by which plants and animals give rise to offspring and which fundamentally consists of the segregation of a portion of the parental body by a sexual or an asexual process and its subsequent growth and differentiation into a new individual.

Indications: Breeding, sexuality.

Examples: Copulation up to birth, but not for forty days after.

3. : *Mortality*

The number of deaths in a given time or place.

Indications: Death, causes of death.

Examples: Death in childbirth - Hürriye Durgun wife of Ali Canveren.

4. : *Population*

Population is the total number of inhabitants or a specific species in a defined area.

Indications: People, named species.

Examples: Kayseri population as posted 300,000.

5. : *Migration*

Migration is the amount of people moving in or out a defined area.

Indications: Immigration, emigration.

Examples: Çevlik-Elmalı - Emigration from Çevlik to Elmalı - half the village, - as many as have remained went - for this reason much intermarriage continues - Father's sister's son e.g.; girl who died (2/16) - fields much better there.

6. : *Nutrition*

The sum of the processes by which an animal or plant takes in and utilizes food substances.

Indications: All terms of food and drink.

Examples: They then get the animal near a hole they have dug to catch the blood [a terrible waste of nutrition!] and argue about the sharpness of the knife.

7. : *Housing*

Housing is the permanent installation of human *shelter*.

Indications: House, hut.

Examples: Gülveren {Man}'s kabile - 15 houses (cf.9) at present - 3 other big kabile.

8. : *Sanitation*

Sanitation is the complex of human and non-human disposal of waste.

Indications: Toilet, bathrooms, wells, garbage.

Examples: Ates's own flat - he has remodelled it, making an open plan (based on T.V.? and magazines?) kitchen, turning the kitchen into a bedroom, and fitting in a modern toilet/shower room.

9. : *Water*

The liquid that descends from the clouds as rain, forms streams, lakes, and seas, and is a major constituent of all living matter and that is an odorless, tasteless, very slightly compressible liquid oxide of hydrogen H₂O which appears bluish in thick layers, freezes at 0 C and boils at 100 C, has a maximum density at 4 C and a high specific heat, is feebly ionized to hydrogen and hydroxyl ions, and is a poor conductor of electricity and a good solvent.

Indications: Sea, lake, river, well.

Examples: Elder men retire into school, (with drummer and Ömer) ³sünnet² - catching small boys, opening their trousers while the Muhtar splashed cold water on their penises, amid much laughter.

10. : *Access to resources*

The energetic or caloric input necessary to reach desired available means.

Indications: Easiness, difficulty to get to *resources*.

Examples: This suggests that the run of 3 bad harvests has lead to a return to yaricilik {gl: sharecropping}, because people do not have access to funds to invest in cultivation.

11. : *Conservation*

Conservation is the principle of maintaining static conditions or reducing dynamic or changing forces into static; e.g. planned management of a natural resource to prevent exploitation, destruction, or neglect.

Indications: Sustainability.

Examples: The whole place very formal, male bound, frightened, conservative and hierarchical.

12. : *Plants*

Any of a kingdom (Plantae) of living beings typically lacking locomotive movement or obvious nervous or sensory organs and possessing cellulose cell walls.

Indications: Bushes, flowers, grass, woods.

Examples: keven - prickly weed fed to cattle. püs - weed yielding gumlike stuff used as a blue dye, - fetching fair price but hard work

13. : *Animals*

Any of a kingdom (Animalia) of living beings typically differing from plants in capacity for spontaneous movement and rapid motor response to stimulation.

Indications: All varieties and species of animals.

Examples: Kazim Isik - one man may own 2 donkeys; about 5 öküz {ox}; 700? sheep in village no one owns more than 50 or so, some only 12 or so. No one sends them to yayla {high pasture} in summer or south to Adana in winter unless they own about 200; this applies in neighbouring villages, 50 or 60 are fed at home.

14. : *Predation*

A mode of life in which food is primarily obtained by killing and consuming animals.

Indications: Wild animals.

15. : *Symbiosis*

The living together in more or less intimate association or close union of two dissimilar organisms in a mutually beneficial relationship.

Indications: Specific species.

16. : *Parasitic*

Something that resembles a biological parasite in dependence on something else for existence or support without making a useful or adequate return.

Indications: Specific species.

17. : *Minerals*

A solid homogeneous crystalline chemical element or compound that results from the inorganic processes of nature.

Indications: Specific kinds.

18. : *Erosion*

Erosion is the unwanted process of transport of lower ground layers by natural causes, like wind and water.

Indications:

The first series of precisising terms are used in combination of the above described.

a: human

Human in this context means properties, features, actions, attitudes and behaviour of a member of Homo sapiens.

b: cultivated

Cultivated means changed by humans.

c: uncultivated

Uncultivated means unchanged or uninfluenced by humans.

d: increase

Increase means growth in quality and quantity.

e: decline

Decline means losing quality and quantity.

f: stable

Stable means a condition, where change requires high energetic or caloric input.

This series of terms act as modifiers for the above mentioned terms and subterms.

g: high

h: low

F: Climate

These terms help to describe the specific situation or condition a reported ethnographic event took place - if it is relevant to the event.

1: dry

If the precipitation is under 40 mm in the previous 30 days the climate is dry.

2: wet

If the precipitation is over 120mm in the previous 30 days the climate is wet.

3: hot

If the temperature in an area is above 29°C the climate is hot.

4: cold

If the temperature in an area is below 10°C the climate is cold.

5: humid

If the average yearly air humidity in a certain area is above 79% the climate is humid.

6: temperate

If the temperature in an area is between 11 and 29C the climate is temperate.

7: precipitation

A deposit on the earth of hail, mist, rain, sleet, or snow.

8: wind

If the average velocity of air exceeds more than 10km/h one speaks of wind.

9: drought

If the precipitation is under 20mm in the previous 30 days there is drought.

G: Economy

1. : *Production*

By production we mean the process of converting basic raw materials into finished or semi-finished products.

Indications: Descriptions of production and manufacturing of objects. This could be weapons, tools and other equipment, but also the production of food and clothing.

Example: We walked round. The factory has its own power supply during working season - now on state supply. Attached plant for ³kusbe². sells the 1/2 sugar waste also. Thousands of pipes and boilers etc. French designer, some German machinery. Seems immensely complex just to make white sugar which is bad for us anyway.

2. : *Distribution*

Distribution means the process of physically dislocating objects.

Indications: This could be descriptions of markets, transport, means of transport (when involved in such activities).

Example: Besleme saat in primary schools. Food distribution to very poor children. We asked - how many (Ne oran) of children come without adequate food, clothes, books.

3. : *Exchange*

Exchange is the bidirectional process of distribution.

Indications: Selling and buying goods, non-commercial exchange of objects. Also exchange of animals and people.

Example: The rest were in good spirits, and about half way began to sing - by exchange of donkeys 0022, Haci Ateß and 0185.

4. : *Consumption*

The utilization of economic goods in the satisfaction of wants or in the process of production resulting chiefly in their destruction, deterioration, or transformation.

Indications: Conversion of resources, goods or services to a form of less utility, usually experiencing a benefit in the process of conversion.

Example: Health and medicine work vastly increased. High consumption of aspirin and cough tablets, lots of colds, coughs, headaches.

5. : *Maintenance*

Maintenance is the process of preserving objects in quality.

Indications: Actions to restore objects to full usage. House-maintaining activities, soil cultivation, repairs.

Example: One child clangd a bell about

7.15, they came in with books about
7.30. Most of the morning repairing the school
stove.

6. : *Labour*

Labour means the process of humans putting *energy* in the *production* or *maintenance* of objects.

Indications: Work in industry or agriculture, manufacturing, housekeeping, childcare.

**Example: The gang going to A.O.'s fields.
They enjoy these days together, and
this crowd did 4 such days during the harvest cf.
1/185.**

7. : *Employment*

Employment means the voluntary *exchange* of *labour* with money or money-like objects.

Indications: Wage labour, casual or long-termed.

**Example: Either he hires people in vlg.
Pays them yevmiye, and charges then
0.5m TL for getting them to SA. Or employs them per m2,
in which case he takes 50% for
himself.**

8. : *Agriculture*

The science or art of cultivating the soil, producing crops, and raising livestock.

Indications: Growing crops, growing plants as raw material for clothing products. Cattle production, animal farming.

**Example: Observation: - Preparation of
tezek {gl: dried dung for fuel},
sifting it etc. Washing and drying of
corn{?} Ploughing (little - Muhtar's sister) (men too)
Carting manure to the fields;**

9. : *Land*

Land applies if there is a cultural distinct notion or concept of territory organized in a euclidean space, with distinct borders and group or individual ownership.

Indications: Fields, gardens, places, hunting grounds.

**Example: Note: Family (Cemal Ates) has not
much land - Ali Canveren gave half his
land to Cemal as yar¥c¥**

10. : *Hunting*

Hunting means the process of catching animals by using mechanical shooting or throwing devices or using stationary traps.

Indications: Bow and arrows to shoot monkeys, fishing, harpooning whales.

11. : *Gathering*

Gathering means the collection of food. This process is uncontrolled in the sense, that there is no human impact on the growth of the collected plants.

Indications: Collection of berries, roots, leaves.

Examples: But 3 or 4 kinds of weeds gathered and eaten.

12. : *Mining*

To work in a pit or excavation in the earth from which mineral substances are taken.

13. : *Logging*

To cut (trees) for lumber or to clear (land) of trees in lumbering.

14. : *Property*

Property means the association, or the measurable relationship between objects and individuals or groups of individuals.

Indications: Ownership, possession.

Examples: Daigi MithabJ (Ahmt. kayin) 10 years ?? in Germany. Now does no work. Lives off his interest. Owns hotel daire - one rental got 10,000 TL.

15. : *Resources*

A resource is the starting point of a process of *production*.

Indications: Raw material, money, timber.

Examples: New roads in vlgs. and Tovla yol to be asphalted. But NO extra resources so far they are following existing projects - new ones will emerge.

16. : *Energy*

Energy is the physical or chemical impact to slow down or speed up molecular movements.

Indications: Oil, coal, charcoal, gasoline.

Examples: Turkey produces ammonia from the atmosphere - very high energy input hence very costly. USSR would supply cheaply.

17. : *Surplus*

Surplus is the positive net-outcome of *production*.

Indications: Profit, staple, gain.

Examples: Bakki (Tom. Bel. Reisi {gl: mayor}) said previous year plenty of grain surplus, made 150 T.L. a day, takes grain to Kayseri.

18. : *Deficit*

Deficit is the negative net-outcome of *production*.

Indications: Loose, costs, bankruptcy.

Examples: He painted less cheerful picture than Nurettin. E.g. cost of iron up 150% in one year; cement etc. So very hard to be sure. If you sell too cheaply, you do not cover future costs, but you need cash.

List of modifiers

a: large

b: small

c: high

d: low

These modifiers can be used to alter the content of the above terms, i.e. to express the opposite, an increase or decrease.

H: Jural

1. : *Norm*

The aim of a norm is to constrain human action in a way desired by the giver of the norm. The giver can be an individual, a corporation or a transcendental entity.

Indications: Law, rule, order, emic terms.

Examples: Nize and Darsyak - claim there is no polygamy at all, all marriage and divorce according to law; not like remoter villages.

2. : *Sanction*

The detriment, loss of reward, or other coercive intervention annexed to a violation of a norm to respond to actions not conforming to the norm.

Indications: Punishment, penalty, emic terms.

Examples: He complained of being closed by Belediye - not clear why, but punishment either for lack of hygiene or for breaking rules.

3. : *Protection*

Protection means the maintenance of security of individuals, groups and their property and norms itself.

Indications: Protection, emic terms. Concepts of protection and security.

Examples: Eventually she and he escaped to the refuge in ³Süleymanli², but this was too much for his former protector, who reported to the Muhtar; 2 fathers arrived poste haste, the matter was thrashed out at the Muhtar's, and justice done and a happy ending.

4. : *Reconciliation*

Reconciliation is the principle by which individuals or groups negotiate interest conflicts until these are solved.

Indications: All processes and discussions that have the above mentioned aim.

Examples: In the old days the village elders would insist on twofold restitution leading to sulh {gl: reconciliation}; the thief asks pardon.

5. : *Revenge*

Revenge is the principle of solving jural conflicts by punishing the opponent according to the degree and by the norm breaking act itself.

Indications: Forms of vendetta, death penalty, torture, unusual cruel or unnecessary forms of punishment.

Examples: Ra@it Suricay was killed in 1967. Fuad Uçal 1 year later (revenge).

6. : *Negotiation*

Negotiation is a way to solve interest conflict by formulating claims and desires that lead as a result to a form of compromise.

Indications: Wedding negotiations, bargaining, contract negotiations.

Examples: Procedure: Arkadaß {gl: friend} goes to a village and asks, a girl is suggested, negotiations

opened. Or boy may like a girl and get his father to act. Boy's father takes 2 or 3 advisors, girl's father may call in relatives, to conduct bargaining.

7. : *Deterrence*

Deterrence is the principle of keeping up norms by announcing sanctions.

Indications: Codification of laws. Anxiety of individuals to break norms because of the expected sanctions.

Examples: * Ibr. is tied to village because although he can afford it, he is deterred by the prospect of 2 wives in Ankara.

8. : *Contract*

A contract is an agreement between individuals or parties of individuals or groups that fixes specific scripts of action.

Indications: All kind of contracts.

Examples: 16/8 Süleymanli man - duvar usta {gl: bricklayer}, gets contracts in combination with arkadaş {gl: friends}, - takes responsibility - e.g. building a bridge. Paid by the unit of a cubic metre (or so), anything from 2.5 T.L. (with all expenses met) to 10 T.L. according to the work etc.

9. : *Rights*

Rights are forms of human action that are guaranteed by law or not sanctioned by it.

Indications: Action sequences based on specific notions and concepts of right.

Examples: Collecting fees a problem. Legal right to withhold documents until payment is made.

10. : *Obligations*

Obligation is the principle by which human action is determined by what is commonly regarded a consequence of the execution of rights.

Indications: Reciprocity.

Examples: [...] it is mecbur {gl: obligatory} for close relations to come from Vengicek.

Use these terms to modify the above mentioned terms.

a: violation

b: conformance

c: change

d: arbitration

I: Material

1. : *Wood*

The hard fibrous substance basically xylem that makes up the greater part of the stems and branches of trees or shrubs beneath the bark and is found to a limited extent in herbaceous plants.

Indications: Timber, trees, bushes, species of trees.

Examples: Put to bed in a little wooden cot, on hot earth, rocked to sleep. Face covered with a cloth, c. 6.30

2. : *Animal products*

Animal products are objects that derive from living and dead animals.

Indications: Leather, horn, bone, meat, dried excrement.

Examples: 8/12 For aptest {abdest=ritual washing}, to save washing feet (? in cold weather ?) they wear soft home-made leather boots, covering the whole foot closely, inside their shoes.

3. : *Plant products*

Plant products are objects made from parts of plants other than wood.

Indications: Leaves, fibers, corn, drugs.

Examples: Wild plants - broom. Fatima on a brush made of tied dried twigs. She said citlik, calgi. Fahrettin said they are different - citlik yenlir, calgi makes brooms.

4. : *Mineral products*

Mineral products derive from minerals.

Indications: Stone, rock, bricks, statues, sculptures.

Examples: Man buried at once before he smells - astonished that we wait 2 or 3 days; hoca says dua {gl: prayer}; coffin only for the rich; feet to the east, flat back; corpse is washed on special stone.

5. : *Derived materials*

Materials that are the outcome of chemical or physical processes adopted to raw materials, are called derived.

Indications: Rubber, charcoal, iron, poison, plastic, potteries.

Examples: Harvest - Süleymanli and beyond do not use the scythe. Women do not normally; saw Müneve scything, but Mehmet Sahiner's wife does not know how. Scythe sharpened by hammering an iron fork.

6. : *Synthesised materials*

Combinations of two and more raw materials by using physical or chemical processes are called synthesised materials.

Indications: Bronze, glass, porcelain.

Interacting terms

Use these terms to combine them with the above mentioned ones. The purpose is to make the content descriptions of your abstracts more discreet and comprehensible.

a: artefact

The outcome of an intentional human action, irrespective of being itself intentional or not, is an artefact.

Indications: Human made objects.

Examples: Products - plenty of vegetables and kaysi

b: instrument

An object that serves a specific function for an human being, is called an instrument.

Indications: Tools of all varieties.

Examples: Rough one-piece wooden spade used for turning wheat to seten. Seten - large stone wheel with square wooden centre operated by an ox for making bulgar etc. Zübeyr had a saw (hÿzar). Zübeyr had a little tool for setting the saw (photograph).

c: permanent

An object is called permanent if it maintains the same functionality repeatedly over a period

of time.

Indications: All varieties of human made tools.

Example: see above.

d: transient

An object is called transient if its functionality serves a spontaneous purpose only.

Indications: Sounds.

Examples: (From Posner 1993: 18) Sounds made by a woman with high-heeled shoes while walking).

e: indigenous

Produced, growing, or living naturally in a particular region or environment.

Indications: Emic terms.

f: traditional

Cultural continuity in social attitudes and institutions.

Indications: Emic terms.

g: imported

To bring from a foreign or external source.

Indications: Emic terms.

J: Technology

These modifiers combine with the segments' name: Technology. Use this segment and the appropriate modifiers to code the specific aspects.

1. : *Food*

Material containing or consisting of carbohydrates, fats, proteins, and supplementary substances (as minerals) used in the body of an organism to sustain growth, repair, and vital processes and to furnish energy; e.g. parts of the bodies of animals and plants consumed by animals.

2. : *Spinning*

Spinning is a technique by which fibres are processed into yarn or thread.
Weaving is a technique by which threads are processed to textiles.

3. : *Leather etc.*

Leather is the conserved skin of animals.

4. : *Pottery*

Potting is a technique of forming adobe or clay into objects.

5. : *Metal work*

Metal work means the creation of objects by using metal as raw material.

6. : *Woodwork*

Woodwork means the creation of objects by using wood as raw material.

7. : *Construction*

To make or form by combining parts.

8. : *Extraction*

To withdraw (as a juice or fraction) by physical or chemical process.

9. : *Transformation*

A major change in character or condition.

10. : *Transportation*

To convey from one place to another.

a: shelter

Shelter means facilities that protect humans, objects or animals from influences caused by weather, animals or other dangerous or ill regarded impacts.

b: storage

Storage means facilities (normally built ones) that serve the purpose to cover or protect.

c: medicine

Medicine are chemical and/or herbal substances that induce chemical or physical bodily reactions in organisms. We do not differentiate between legal and nonlegal aspects in that context. Medicines are normally regarded as healthy or re-establishing health.

d: reproductive

Reproduction means the process of replication.

e: ritual

Any formal and customarily repeated act or series of acts.

f: indigenous

Produced, growing, or living naturally in a particular region or environment.

g: traditional

Cultural continuity in social attitudes and institutions.

h: imported

To bring from a foreign or external source.

i: learning

To gain knowledge or understanding of or skill in by study, instruction, or experience.

K: Ethnographic Intent

We think that most of these terms do not need any further definition. Their main purpose is a rough classification of contents in relation to other codes. By this we mean that they provide additional information to somebody who found abstracts or other material as to what you as researcher would classify this material within your scientific line of arguments. These terms are not mutually exclusive.

1. : *Description of:*

Mere description of events, like observations, without any interpretation or further analysis.

2. : *Identification of:*

If your data allows you to identify an event or process without doubt.

3. : *Classification of:*

If your data allows you to classify an event or process within a classificatory range.

4. : *Evidence for:*

The data serves as evidence for your scientific argumentation, or an indigenous theory.

5. : *Good example:*

The data has an illustrative character, could be used as a proto-type example. Things you are almost certain to use in later analysis.

6. : *Summary of:*

The abstract or data is especially suited to summarize observations or collections over a longer period of time.

L: Meta Context

Meta Contexts classify the specific nature of the material in detail.

1. : Event
2. : Behaviour
3. : Description
4. : Formulae
5. : Explanation
6. : Biography
7. : Story
8. : Myth
9. : Ritual
10. : Prediction

- a: interview
- b: observation
- c: participation
- d: conversation
- e: third party

M: Agents

The emphasized or central role in an event, relationship or state.

1. : Woman
2. : Man
3. : Boy
4. : Girl
5. : Someone
6. : Baby
7. : Group
8. : Animal
9. : Plant
10. : Inanimate
11. : Supernatural
12. : Environment
13. : Government
14. : Company
15. : NGO

- a: young
- b: old
- c: external
- d: other
- e: plural

N: Prepositions

Determine the flow or dynamics of the role relationship between agent and patient.

1. : in
2. : out
3. : to
4. : from
5. : up
6. : down
7. : exchange
8. : <--
9. : -->
10. : <-->

Note: 1, 4, 6, 8 are equivalent

2,3,5,9 are equivalent

7 and 10 are equivalent

The equivalences are provided to make it easier to conceptualise the relationship.

O: Role Attributes

- 1: Authority
- 2: Benefit
- 3: Care
- 4: Deference
- 5: Effort
- 6: Feeding
- 7: Hostility
- 8: Informing
- 9: Joking
- 10: Question
- 11: Payment
- 12: Kin
- a: not
- b: low/small/diminished
- c: high/large/enhanced

Items in this category are patterned on a directional paradigm, in conjunction with the N: Prepositions category. e.g. N9, O1 is interpreted as 'gives order' (see below). N8, O1 is interpreted as 'takes order' (see below). N10, O1 is interpreted as 'equality'.

If you do not use a N:Preposition code you are denoting an unspecified relationship: O1 would be read as an unspecified Authority relationship.

Table of <-- and --> and <--> interpretations:

	<--	-->	<-->
1:	gives order	takes order	equality
2:	presents benefit	receives benefit	reciprocity

3:	provides care	receives care	mutuality
4:	shows deference	receives honour	courtesy
5:	works for	worked for	cooperation
6:	gives food	receives food	nurturance
7:	causes harm	suffers harm	conflict
8:	sends message	receives message	conversation
9:	initiates joke	receives joke	jesting
10:	requests data	asked for data	consulting
11:	makes payment	receives payment	exchange
12:	ancestor of	descendent of	sibling of

P: Patients

The accompanying or peripheral role in an event, relationship or state.

1. : Woman
2. : Man
3. : Boy
4. : Girl
5. : Someone
6. : Baby
7. : Group
8. : Animal
9. : Plant
10. : Inanimate
11. : Supernatural
12. : Environment
13. : Government
14. : Company
15. : NGO

- a: young
- b: old
- c: external
- d: other
- e: plural

T: Threads

1. :
2. :

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WWW-presentation of publications, research material and raw data. Thanks to Prof. Stirling for permitting us to use his fieldnotes to illustrate this book. Canterbury
- Electronic Interface to *Webster's dictionary* (<http://gs213.sp.cs.cmu.edu/prog/webster>)
by Bennet Yee

5. Appendix

1. Floppy discs (Mac)
1. Floppy discs (DOS/Windows)
1. Reference Code sheet

Descriptions of the software are excerpts of the author's files (readme). All rights remain with the software authors. We tested all packages on different platforms but cannot take over responsibility for occurring bugs, errors and their consequences for your work which we possibly overlooked. Please try the packages out and decide on own risk. Some packages are ³shareware², this means that the software authors expect you to pay a small fee if you decide to make use of the software. Read the documentations for further information.

5.1. Software (Mac)

5.1.1. SchoolStat

[SchoolStat](#) is designed primarily for schools (hence the name!), especially teachers who wish to show how probability distributions can be brought alive with Macintosh graphics. It goes much further though, and

has a spreadsheet, sorting, arithmetic and mathematical transformations (including N scores), statistical tests including descriptive statistics, confidence intervals, paired and independent comparisons and introductory ANOVA (parametric and non-parametric), correlations, linear regression, contingency tables, and more. It has a graphing facility for scatterplots, histograms, boxplots, stem and leaf diagrams, and pie charts. A log window keeps tally of your analyses. It accepts 30 columns by 1000 data points in each and will perform any of the functions on your own data. It includes both static probability tables (e.g. normal, inverse normal, t- and F-distribution, chi-square distribution, and others) and active tables which will plot the distributions and fill in the specified (by the user) probabilities as visible areas under the actual curve. These are in real time and have to be seen to be believed! In addition, you can create simulated distributions (saves typing in data for examples!), and perform odds ratio relative risk and sensitivity/specificity computations. A fully interactive help system is available (modeless windows) at all times accessed from the Apple menu (Command-/-).

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5.1.2. BBEdit Lite

[BBEdit Lite](#) is a freeware derivative of BBEdit 3.5, the popular and critically acclaimed text editor for programmers, HTML authors, on-line-service users, and anyone else who needs to edit plain-text files.

BBEdit Lite is shipped with a QuickStart document which describes many of the application's features. Full documentation, as well as a considerable amount of additional functionality, is available with the purchase of BBEdit 3.5. See the document ³How do I order BBEdit 3.5² for details on obtaining your own copy of BBEdit.

If you have any suggestions, comments, or questions regarding Lite, please send us email at <bbsw@netcom.com>.

BBEdit Lite offers the following useful functionality:

Stationery documents. You can create a stationery document with BBEdit; whenever you open that document with BBEdit, its contents, format information, and window position will be used to create a new untitled window. You can also create a ³global² stationery document which will be used as a template for all new windows.

Open Several. This variation on the standard ³Open...² command enables you to open multiple files at once from multiple locations in the file system. You can also specify aliases to files, and those aliases will be resolved all at once. (Hold down the Option key while pulling down the File menu to see the ³Open Several² command.)

Powerful multi-file search. BBEdit offers the usual multi-file search, in which a disk directory is scanned and the files are opened one at a time; however, BBEdit can also display the search results in a window for easy browsing (and selected entries in the window can be opened for display). The search can also be limited to files that are already opened for editing in BBEdit, or to files which were already found in a previous multi-file search. BBEdit also offers multi-file replace capability for automated ³search and

destroy² operations.

Zero cost. BBEdit Lite is free, with no qualification. It is not a shareware or commercial product. It is not a demo version, and there is no expectation that you will buy anything.

BBEdit Lite also offers the following:

High quality. BBEdit Lite is based on mature and stable technology; this technology is the beneficiary of years of in-house and field use and testing. The commitment to quality and functionality shown in BBEdit 3.5 is reflected in BBEdit Lite.

File size limited only by available memory. BBEdit Lite's default partition size is 640K of RAM. This can be set as low as 450K, to make BBEdit Lite the ideal constantly-resident editor for small to moderate tasks, or turned up as high as necessary to edit many large files or perform large-scale search-and-replace operations. If you're running under System 7.0, BBEdit Lite automatically takes advantage of available system memory, so that you don't have to adjust its partition size to edit large files.

No hard limit on number of files open. The number of files that BBEdit Lite can have open at once is limited by available memory, and can be increased or decreased by adjusting BBEdit Lite's partition size as appropriate.

Easy manipulation of multiple files at once. The ³Open Several...² command makes it possible to open multiple files from different folders at once, and the Save and Print commands can operate on all open files at once.

Pattern (³grep²) searching. Matching patterns can be constructed so

that strings other than exact literal matches can be found and replaced;

for example, converting Pascal comments to C comments, or converting C++ comments to C comments.

System 7 awareness. Besides supporting all of the basic System 7 functionality such as 32-bit mode, virtual memory, and the like, BBEdit also takes advantage of specific System 7 functionality wherever possible in order to either improve performance or to improve its appearance. This is done without sacrificing System 6 compatibility.

High performance. Try and enjoy.

Postal:

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P.O. Box 1048

Bedford, MA 01730-1048

Phone: +1 508 651 3561

Fax: +1 508 651 7584

WWW:<http://www.tiac.net/biz/bbsw/>

email: bbsw@netcom.com

5.1.3. Concorder

A [concordance generating](#) program. Similar functions to TACT.

5.1.4. Kant Generator

A funny game - generates automatically [Kant-like](#) texts...

5.1.5. Text Counter

[Counts words](#) in texts plus basic statistics.

5.1.6. Egrep

A unix-like [text-search](#) utility.

5.1.7. Gene 4.1.1

[Gene](#) is a shareware Macintosh genealogy database management program, written by Diana and David Eppstein. (Diana did most of the programming, while David contributed to the database design, algorithms, and documentation.) Gene stores genealogical information in cards representing people, places, pictures, and events. You can use Gene to store family data and notes, draw and print family trees and pedigree charts, show how different people are related, or browse the database by clicking on names in cards and trees.

Gene's clean user interface has drawn critical praise: ³The look of this prodigiously likable little shareware item should be the envy of designers of more expensive software² [David Pogue, MacWorld magazine, June 1995, p. 147]. But Gene is also capable of handling very complicated databases with thousands of names, multiple marriages and divorces, adoptions, illegitimate children, and intermarriage between relatives.

5.2. Software (DOS)

5.2.1. Bananoid

[Bananoid](#) is a breakout-style game with high (360 x 240) resolution MCGA graphics, an oversized (544 x 240) play field and mouse-only control using page-flipping for the screen control. The falling blocks result in differing paddle effects, mostly good - one bad. I know we're all a little tired of wall-block-paddle-pill games, but the idea was simple -- the graphics drivers were what interested me. The speed is controlled by vertical retracing, so on a machine slower than a 12MHz 286 the game may appear sluggish. O well... But on a faster machine, the game operates at approximately 60 frames per second. There is only data for seven levels. That's enough to demonstrate MCGA as a viable game mode on VGA cards.

5.2.2. BookBank

[BookBank II](#) is a PLMS - Personal Library Management System. With configurable reports and detailed information tracking, it is a powerful yet easy way to track a personal, professional, or company library.

To install BookBank II, simply copy all the files to the appropriate location and then just type BB2. All necessary file configuration will be done automatically.

Internet EMail: carnellm@citadel.edu

Data by Design

P.O. Box 31994

Charleston, SC 29417-1994

Phone: (803)556-2521

5.2.3. Elvis

[Elvis](#) is a clone of vi/ex, the standard UNIX editor. Elvis supports nearly all of the vi/ex commands, in both visual mode and ex mode. Elvis adds support for multiple files, multiple windows, a variety of display modes, on-line help, and other miscellaneous extensions.

Like vi/ex, Elvis stores most of the text in a temporary file, instead of RAM. This allows it to edit files that are too large to fit in a single process' data space. Also, the edit buffer can survive a power failure or crash.

Elvis 2.0 runs under the following operating systems:

UNIX. If you have X-windows, elvis can use a graphical interface, in addition to the traditional text-based interface.

MS-Windows/95 and Windows/NT. Currently it can only run as a console application (text-based interface); hopefully this will change soon. The mouse is supported here.

MS-DOS. It can also run in a DOS window under Windows 3.1.

OS/2 (not yet, but soon). Elvis will offer a graphical interface here, too.

Elvis is freely redistributable, in either source form or executable form. There are no restrictions on how you may use it.

You can contact the author via e-mail at kirkenda@cs.pdx.edu, or via postal mail at:

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USA

5.2.4. TACT

[TACT](#) (Text Analysis Computing Tools), a system of 15 programs for MS-DOS, is designed to do text-retrieval and analysis on literary works. Typically, researchers use TACT to retrieve occurrences of a word, word pattern, or word combination. Output takes the form of a concordance, a list, or a table.

Programs also can do simple kinds of analysis, such as sorted frequencies of letters, words or phrases, type-token statistics, or ranking of collocates to a word by their strength of association.

TACT is intended for individual literary texts, or small to mid-size groups of such texts, such as Chaucer's poetry, Francis Bacon's Essays, Shakespeare's plays, Jane Austen's *Pride and Prejudice*, John Irving's *The Cider House Rules*, similar works in French, German, Italian, Spanish, Latin, and other modern European languages or languages using a roman alphabet, and classical Greek. Using TACT for large corpora can raise problems best handled by software like ICAME Lexa or Open Text Systems Pat.

Processing a text with TACT normally begins when the researcher tags or marks up an ASCII copy of the text. In most instances, mark-up helps the researcher do analysis afterwards. The researcher first uses a text-editor to insert these tags, usually within diamond-bracket delimiters. This mark-up helps one to refine word-selections and to provide reference citations to retrieved passages. In a play, for example, acts, scenes, and speeches are obvious things to mark; in a novel, chapters; in a narrative poem, books and stanzas; in a lexicon, subdivisions of the entry; and so forth. The researcher may also, however, want to mark proper names (of people and places), episodes, date, location, audience, narrative mode, theme, etc. For instance, words may be retrieved by speaker if the original text includes a tag before each passage that is spoken by someone different.

The researcher may also employ four programs, Preproc, Makedct, Tagtext, and Satdct, to add tags to each word of the ASCII text. These include the word's lemma (the dictionary form of the word), part-of-speech, or conceptual label.

The TACT system is multilingual. In order to display foreign languages, it supports the extended ASCII character set of the IBM PC, and with other font-editing tools, its capabilities can be extended to other modern European languages, such as French, German, and Greek. (Hebrew, Arabic, Cyrillic, and languages such as Chinese are beyond its present design.) It supports multilingual analysis as well by allowing for proper alphabetization, convenient keyboard entry, and printing on devices that require special ³escape codes² to produce non-ASCII characters -- even if these sequences are different from those that would be used to enter the character from the keyboard, or display it on screen.

Once the text is marked up, Makebase converts it into a database for efficient retrieval. Makebase invites the researcher to define, interactively, the alphabet and its collation sequence, special characters, and the reference tags used for markup. Use a word-processor or text editor to divide large texts into smaller files for sequential processing by a batch file you create with Buildbat. This batch file uses both Makebase and a second program, Mergebas, to create a large textual database out of smaller ones.

After Makebase creates the textual database (or.TDB file) out of the ASCII text file, a researcher may employ six programs to retrieve information from, or to analyse, that text.

TACT is a text-analysis and retrieval system for MS-DOS that permits inquiries on text databases in European languages. It has been developed by a team of programmers, designers, and textual scholars including John Bradley, Ian Lancashire, Lidio Presutti, and Michael Stairs. It was begun under the IBM-University of Toronto Cooperative in the Humanities during 1986-89. The manual is to be published by the Modern Language Association of America.

5.2.5. HFIND

[HFIND's](#) function is straightforward: find text in text files. The reason you should choose HFIND over all those other text finders is simple. HFIND highlights the text you were looking for when it displays the

line in which the text was found.

Especially if you use your PC's 50-line mode (included), it can be hard to see what you were looking for in a crowded screen full of search results. HFIND highlights what it found in one of several ways.

If you use ANSI.SYS (or equivalent, see next section), the search target is indicated within its line by bright yellow text. If ANSI.SYS is not present, the target is indicated by surrounding arrows.

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5.2.6. KWIKSTAT 4.0

[KWIKSTAT 4.0](#) performs data analysis for scientific and business data. It was a 1992 SIA winner, was created by and is maintained and supported by professional statistical consultants. It is recognized as one of the best, most well known, professional and complete data analysis packages. Over 10,000 registered copies sold in 60+ countries. Includes tutorials and help on ³How to select the proper procedure to use.² Uses dBASE III and IV files, can import ASCII, comma delimited and 1-2-3 files. Windows-like menu interface. Data analysis procedures include descriptive statistics, t-tests, chi-square, analysis of variance with multiple comparisons, simple and multiple regression, graphs, crosstabulations, non-parametric procedures, life tables, survival analysis and more. Graphs include histograms, barcharts, scatterplots, time series plots and more. Noted author Michael Callahan calls it ³The Ultimate in Statistics, no program I've seen beats KWIKSTAT.² PC Week calls it the ³Numbers Game Winner.² Author John Sweeny says, ³KWIKSTAT is God's answer to SPSS. It's simple to use, fast, cheap and powerful.²

TexaSoft, PO Box 1169, Cedar Hill, Texas 75106-1169, or by phone (MC,

VISA & AM.EXP.) Order line is 1-800-955-TEXAS. Others call 214-291-2115. FAX:214-291-3400. CIS:70721,3145, Internet 70721.3145@compuserve.com.

5.2.7. SHOEBOX

[SHOEBOX](#) is a database management program, designed expressly to meet the needs of the field linguist. Using SHOEBOX, the linguist can easily enter, edit, and analyze lexical, textual, anthropological and other types of data. For example, with SHOEBOX, one can:

Maintain a simple dictionary, or a more complex lexicon,

Interlinearize text, where new words are automatically entered into the dictionary,

Do grammatical filing and analysis of text data,

Enter and file cultural notes,

Maintain nonlinguistic types of databases, such as address lists or library catalogs.

SHOEBOX contains numerous features that aid in accomplishing the various tasks that are often a part of

linguistic data storage and analysis. These include:

A text editor for the entry and editing of data,

The ability to conduct very rapid searches; any data record can be accessed nearly instantaneously for editing or review,

A rigorous select option that allows the user to view only those records that conform to certain criteria,

The ability to specify a special sort ordering, taking into account groupings of digraphs and characters from the IMB extended character set,

A flash card function to aid in language learning,

Functions to number and interlinearize text.

SHOEBOX allows up to seven databases to be concurrently loaded, each accessible by the touch of a single key. Because each database can reference the other databases, information can be easily retrieved and integrated from any location.

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Dallas, TX 75236 U.S.A.
phone 214/709-2404
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5.2.8. Word Count 1.05

Features

Count of lines, characters, non-whitespace characters, words, distinct words and unique words.

Average length of words, distinct words and unique words.

Sorted word lists with frequencies.

Word length distribution histograms.

Code page awareness.

³Quick scan² mode.

Multiple filespecs/wildcards.

WordStar 6.0 document format support.

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V1.0

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