

Design Intent

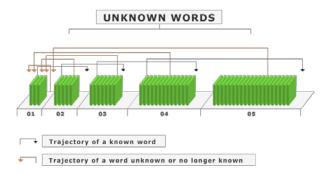
To write well for this project, we need more than word-craft. We need an understanding of the big picture for the whole project: what are we aiming to achieve here? Who are the customers? And what do we want to do for them?

To understand what kind of text we want to produce – we need to delve into the design of the learning experience and grasp the full picture:

Starting Point 1: A Deck of Cards

Imagine the classic flash-cards: on the front of each card you have a word – flash it to the learner: "What does this mean?" - The learner will try to recall the meaning. Then on the back of the card you have the answer.

Depending on whether the answer is correct, the card gets moved forward or backward in a spaced repetition sequence. (Thus 'hard words' appear more). The repetition helps with memorisation.



Moving this on to a computer:

Each user has an account, which keeps track of the user's learning progress. When the user logs in on a particular day, the app reminds the user to go over that words that have an 'optimal revising time' that falls on that day. As user adds new cards, and learns and revisits cards – the reminder schedule is automatically updated to prepare for future revisions.

Here's what we want to do:

We want to give the user complete choice of cards – rather than being assigned a list words to memorise (like memorising the dictionary starting from 'A') – the user can have something relevant to his or her interest. For example: Want to read this novel? Then learn these relevant words first.

Then, let's go one step further. Let's have a different way of picking 'which cards to learn'.

Explore and Collect: let's allow the user to pick up any word that's relevant, **at that time**, and collect it, and **add that onto the learning list** – and the app will automatically keep track of it, and reminds the learner at just the right time to revisit it.

Learning is most efficient when the learner's active attention is engaged. Hence we let the learners guide their own learning – and drive their own discovery, at that instant of curiosity: they encounter a new word – they want to know what it means – they find out – collect the word – it gets auto-tracked – they continue on exploring.

In summary, we want a continuous, free-flowing experience.

This, in many ways, is like the pattern of our thoughts – it rambles along a lively path, springing from one point, to another point.

Discussions can ramble – flowing from one topic to another:

In a **situation** like *X* [writer to fill in], someone being **cynical** would say: "*Y* [writer to fill in]". You would feel that they are not **sincere**, or they don't think others are sincere

Oscar Wilde said a **cynic** is someone who knows the price of everything and the value of nothing. **Cynicism originates** from a Greek **philosopher**... a dog ... [some more random facts]

[If you don't click on Oscar Wilde, it will go on and on, or if you do:]

Oscar Wilder was a **famous** Irish **playwright** and **poet**, [Insert some random interesting, fact bizarre about him and ramble on] ...

Vocabulary building has a similar feature: we want to re-invent the experience of fumbling through a dictionary, going from one word, finding its definition – then discovering more words within the text of the definition – then going to another word...

Starting Point 2: Introducing Ramblets

The main function of a Learner's Dictionary is to help the learner discover the meaning of a word, by this virtue it is a learning tool. An electronic or online dictionary is just doing this on a computer.

The typical format of a dictionary entry is:

Word: Definition of the word.

Narrative style

A Learner's Dictionary often uses a narrative explanation – as if talking to a student in person, instead of a scholarly aphorism-style definition. For example, compare these:

Scholarly dictionary:

Moisture: A degree of wetness.

Narrative dictionary:

Moisture: When you say the soil has high moisture content, it contains a lot of water. The water exists in the form of microscopic droplets – so tiny that they are invisible to the human eye.

Simplified language

A Learner's dictionary also has a list of so-called 'definition words' – these are the most basic 850 to 2,000 words in the language. All the other (more complex) words are defined using these basic words. This means, once you master the basic words, you can go mono-lingual: using English to learn English. VOA has its 'Special English' list, Cambridge, Longman, Collins all have their respective lists for their learner's dictionaries.

Chain-search within definition

For example, if you search for the word 'moisture', then get this definition:

When you say the soil has high moisture **content**, it **contain**s a lot of water. The water exists in the form of **microscopic droplets** – so tiny that they are **invisible** to the human eye.

Imagine that you don't know the meaning of the highlighted words – you need to do further searches to find out. Now with a paper dictionary, you just flip to those pages – with computerised dictionary – you can copy and paste the word into the 'search bar' – or, in most dictionary software, you can just double-click on any unknown word on the page – and the software will search for that word – then either open a pop-up window, or forward you to the resulting page.

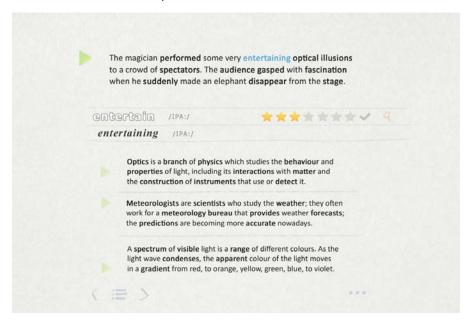
If you consider this kind of chain-search a learning method, it also has the benefit of engaging the learner's active attention – that moment of self-guided curiosity – which helps a lot in learning.

'Vocabulary builder' embedded in 'stories' (narratives)

Consider the above example; the learner has the opportunity to discover 5 more (new) words – spring-boarding from one anchor word – and the brief paragraph, like a story, can be the string that ties them together, enhancing the potential for associative memory.

Associative memory is also very beneficial for learning – and is used in various learning methods.

Ramblets interface: In a way, we are re-constructing the experience of fumbling through a dictionary. Let us examine the mock-up:



The learner starts from the paragraph on the top – let's call this rectangle a 'ramblet'.

- Then the learner can, by his or her curiosity, click on any of the highlighted words within that ramblet. The clicking of a word (let's call it 'keyword') triggers two things:
- First, in the middle, it shows the learner which word was clicked, it also shows the 'headword form'. ('entertaining' is the form clicked, 'entertain' is its headword form).

- Second, in the area below, it shows other paragraphs, based on a search of the word the learner clicked. (The mock-up doesn't actually show relevant examples – but in the real case, we want these paragraphs to illustrate the concept 'entertain' and help the learner understand the meaning of 'entertain'.)
- Please note that the explanations are also 'ramblets'.
- For example, imagine when the learner clicks on 'optical' it shows 3 ramblets below:

Optics is a branch of physics which studies the behaviour and properties of light, including its interactions with matter and the construction of instruments that use or detect it.

An **optical fibre** is a **flexible**, **transparent** string made of very pure glass as thin as a human hair that acts as a wave guide, or a 'light pipe', to **transmit** light from one end of the **fibre** to the other.

A rainbow is an **optical** and **meteorological** phenomenon where a **spectrum** of light appears in the sky when the Sun **shines** on to **droplets** of **moisture** in the Earth's **atmosphere**.

 Reading these paragraphs helps the learner to get a better idea and understanding of the concept 'optical'.

A glimpse of fruition

A rainbow is an **optical** and **meteorological** phenomenon where a **spectrum** of light appears in the sky when the Sun **shines** on to **droplets** of **moisture** in the Earth's **atmosphere**.

If you click on 'meteorological' – it brings up the explanation:

Meteorology is the interdisciplinary scientific study of the **atmosphere**. Meteorological phenomena are observable weather events which are explained by the science of meteorology.

You can then click on 'atmosphere' – and it brings to you the search result based on that keyword.

Imagine when the production is rolled out, we will have thousands and thousands of these ramblets – and you can virtually click on any word – and the learning experience flows on and on.

What exactly is a ramblet?

A ramblet is a brief paragraph of text, typically under 35 words and less than 185 characters (magic number to be revised). It can consist of one long sentence or around three short ones.

- It can be presented as a block object on the screen.
- It can be a paragraph of just random facts or it can be part of a dictionary:
 Definitions are ramblets.

Explanations are ramblets.

Example sentences are ramblets.

Usage notes are ramblets.

Even thesaurus entries are ramblets: e.g. instead of a sentence, you have a row of words: "emit, produce, release, give off, give out, send out, discharge, emanate, secrete, radiate."

• Ramblets are created by freelance writers and editors – using my specs as a guide. They are skilfully crafted, e.g. you can use one sentence to explain multiple concepts: "When you say

there is a **cheerful atmosphere** in the room, it makes you happy to be in that room; as if the **air** of that room **cheer**ed you **up**." Rather than one definition for each: "Atmosphere is the air around you." and "If something cheers you up, it makes you happy."

The writers and editors can basically 'ramble on' and create the learning material:

When you **consider** a **proposal**, you think about the **suggestion**, **offer** or plan that has been **put forward**, in order to **determine** whether it will be **appropriate**.

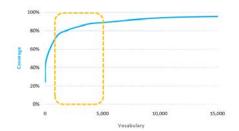
If someone offers you a job, or gives you an offer (of the job) ... **on the table**, and be prepared to give - conditions - such as the price proposed.

If I say I **intend** to take the offer ...

Starting Point 3: Focus

We get great results very quickly by focusing on grasping the main thing (and giving up perfection). We are applying the 80/20 rule, for example: Tom Cobb (a linguist at Quebec Uni) has a research about a list of 2,570 'word families' – mastering these allows the student to read through academic

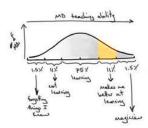
and general reading materials proficiently.



The simplest words cover more than half of all the words you read – the curve rises sharply then enters into a plateau – the effort in learning the words in the golden section is most effective: because it **enables general reading**. We avoid specialised, obscure, rare areas where the **ROI of learning** is much lower comparatively.

Let's imagine that language learning is divided into 3 phases:

- Phase 1: Most people through basic schooling have already learnt the basics they know some words and some rules but they are not yet able to use the language in live action.
- Phase 2: The middle phase is our focus, where people learn to use the language they will become able to understand others and express themselves.
- Phase 3: Then the final phase is when the learner enters into a live environment for example, in-country and actually interacts with other people in that language.
 Language is not on text books, it is alive and dynamic: people listen to what others say and pick up the patterns they use theory of mind to predict others' understanding they finish each others' sentences, silently or aloud it's integrated with culture and social activities.



Our basic approach is to focus on the most effective part (showing most improvement) – while sacrificing 'perfectionism'. The key objective is 'enablement' – to prepare the learner for entering a dynamic environment – where he or she can then draw on the 'learning repository' and quickly pick up.

By default, we are also selecting the audience (target customers) – the learners who are at the right stage and with the most potential for great improvement.

Starting Point 4: Incremental Mastery is the Key?

Some background information to consider



One question was always on my mind: as a learning method, would this really be effective? Does it really make an impact on the learner's brain? Does the process or flow actually produce 'learning'? This is the most important concern.

And to address this question, I ask myself: "What would be the best way for me to learn and understand Finnish?" (Or Dutch, which is somewhat more similar to English.)

Then the answer came up: I want to see a piece of some sample text, a short paragraph (from advertising, from road signs, from information on some card, or an excerpt of some magazine, or some summary or headline) – this piece would be rather foreign to me.

Then I imagined the best way for me to understand and learn this piece:

- 1. First I place this piece at the centre of my focus, and get ready to tackle it.
- 2. Then I click on each unknown word, and this word is explained to me what is its meaning, etc. I also want to play the sound of this word many times most likely also in a 'slow mode' or 'analysed mode' where each syllable is exaggerated and amplified (this would be a specially recorded audio) thus I feel that I have fully grasped this word.
- 3. Then onto the next unknown word in the paragraph. After methodically going through each bit, I have a lot of understanding of all the elements I can also understand the whole sentence/paragraph.
- 4. Then I play the audio for the whole paragraph which I can now completely understand I can even reproduce it since I have grasped the components so well.

There is a change from non-understanding to understanding – this is progress.

The idea is that the learner can get to completely understand and master one piece (this implication of this intent may be why the 'current ramblet' is positioned at a central place, and generally stays there until the whole piece is mastered), then another piece – and eventually thousands of them, all of them, any of them – then eventually able to understand general text.

Flashcards, diary and spaced repetition

The other good thing is all the newly learnt words are automatically kept on the learner's file – to be brought up and refreshed later the same day, the next day, the next week, etc. This helps the learner remember the words permanently.

Eventually we have an entire profile of the learner's progress: which word the learner knows well, which is at 60% - effectively we have a 'brain model' of the individual learner to map out what is in the learner's head. (We can even use this information to improve the above experience – e.g. only highlighting the unknown words that are unknown for that particular learner).

In summary, it is a process of exploring, discovering (find meaning), mastering (each piece), combined with revisiting (auto-diary repetition); by this way, building up the exposure repository.

Back to the Question: What Text?

As you can see by now, we want to produce the ramblets. Yet, we want the ramblets to serve a range of purposes:

- To help the learner find out the meaning of a word (concept);
- To illustrate the structure of the English language (as beautiful examples);
- To be studied closely as text for incremental mastery;
- And we want the whole process to be fun like reading about random facts.

More on what constitutes high quality text for this project...