

This book belongs to...

Contents

Introduction

Table of contents, session purpose and outcome, and further reading.

Case Studies

Three real-world examples of content management in action.

Basic Concepts

Introduction and definition of the three basic content management concepts.

Classical Categories

Expression of basic content management concepts as collections of properties.

Modern Categories

Contrasts between classical category structures and modern thinking on categories.

Requirements

Translation of classical and modern categories into computer-friendly requirements.

First Conclusions

Summary of argument till now.

Exception Handling 1

Explanation of how computers make decisions through exception handling.

Exception Handling 2

Explanation of how people make decisions and why computers can't do it.

Further Thinking

Opportunities to explore the sources of basic concepts and to build a better mousetrap.

Purpose

This session introduces a new way of thinking about content management, and the problems that typically arise during planning and implementation.

Outcome

At the conclusion, you will have a theoretical explanation for why computers can not handle certain decision-making processes crucial to content management. It provides a framework for considering the difficult problems posed by content management systems.

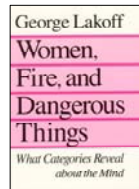
Format

This session will use this workbook to help introduce the concepts and put them in the context of your own experience.

Disclaimer

This session is not a comprehensive introduction to cognitive linguistics, nor does this session provide a quick-fix recipe for building a better CMS.

Resources and Further Reading



Women, Fire, and Dangerous Things: What Categories Reveal about the Mind. Lakoff, George. University of Chicago Press: 1990.



The Way We Think: Conceptual Blending and the Mind's Hidden Complexities. Fauconnier, Gilles, and Mark Turner. Basic Books: 2003.

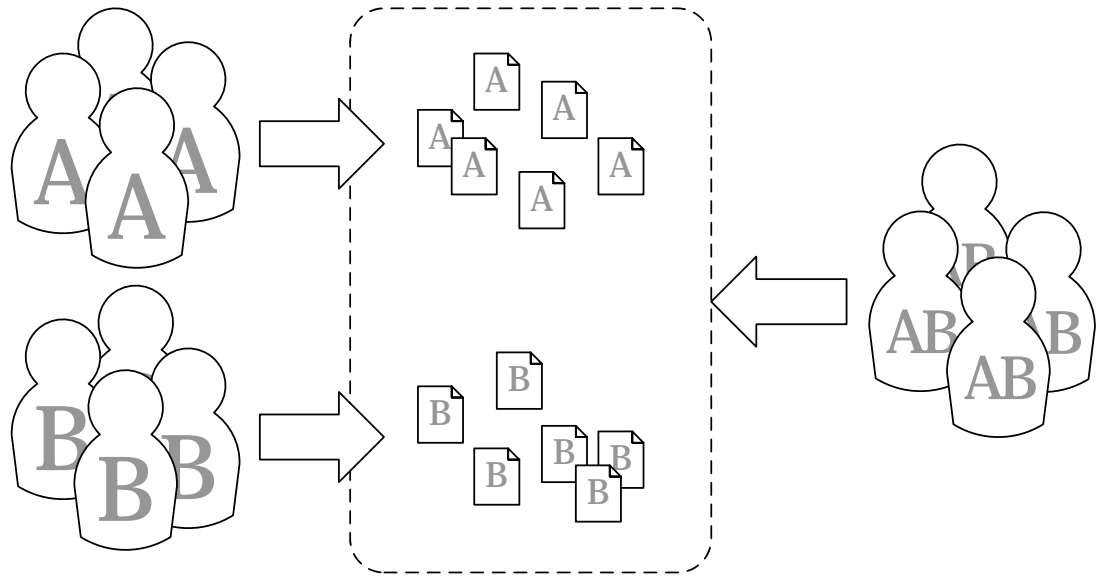


Content Management Bible. Boiko, Bob. Wiley: 2001.

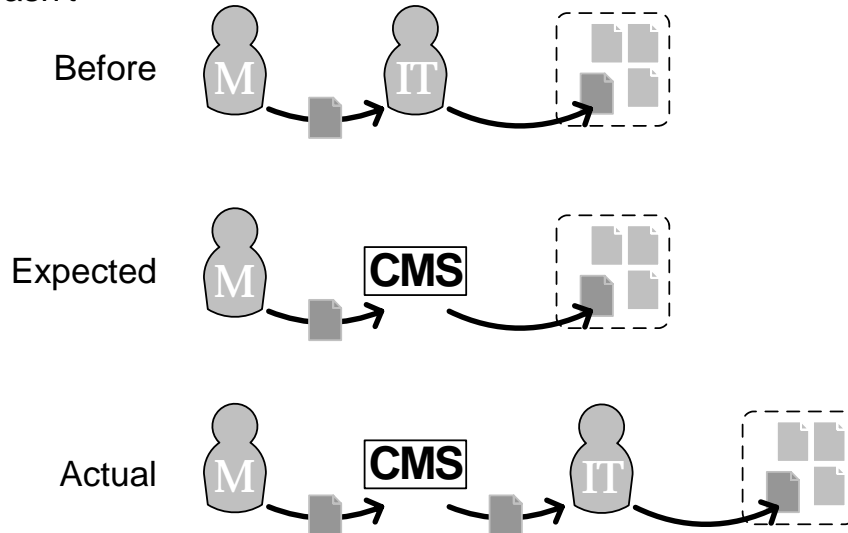
Keywords for web searches:

- > conceptual blending
- > conceptual metaphor
- > prototype theory
- > conceptual integration networks
- > metaphor theory

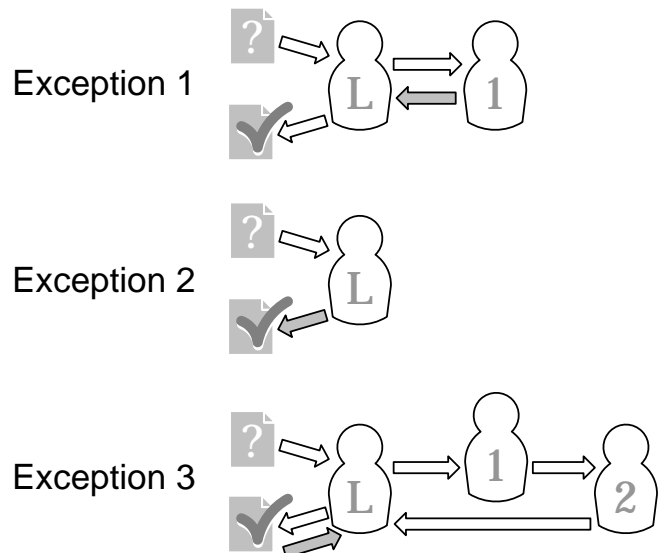
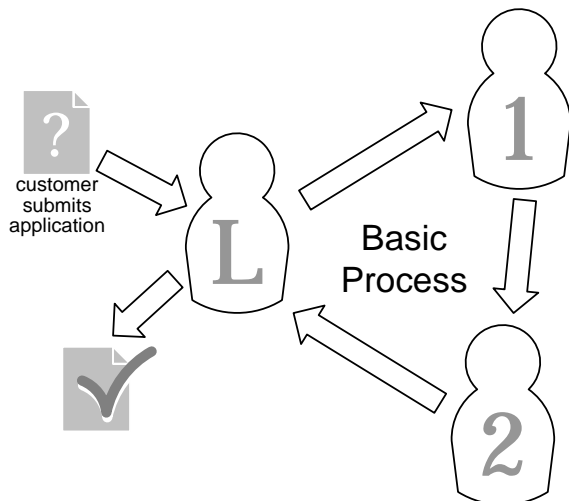
1: Mutant Users



2: The Pilot That Wasn't



3: Everything is Exceptional



Content Management Concepts

Content management issues boil down to three main concepts.



Workflow



Roles



Content

All rules and requirements revolve around these three concepts.

First, select a concept. To use our time most effectively, you will concentrate on this concept for the rest of the exercises in this workbook. Next, give a real-world example of the concept. Finally, define the concept.

Pick a concept:

(circle one)

Workflow

Roles

Content

Give an example:

Define the concept:

Classical Categories

For thousands of years, categories have been defined by properties.

dog

- four legs
- fur
- cold nose
- barks
- floppy ears
- loyal

bird

- beak
- feathers
- two legs
- wings
- flies
- sings

toaster

- rectangular
- warms bread
- slots on top
- plunger
- heat control
- electrical

But properties can not account for the complexity of categorization.

For the concept you selected, identify the properties that define the category. You can pull keywords from your definition on the previous page.

Your concept:

(circle one)

Workflow

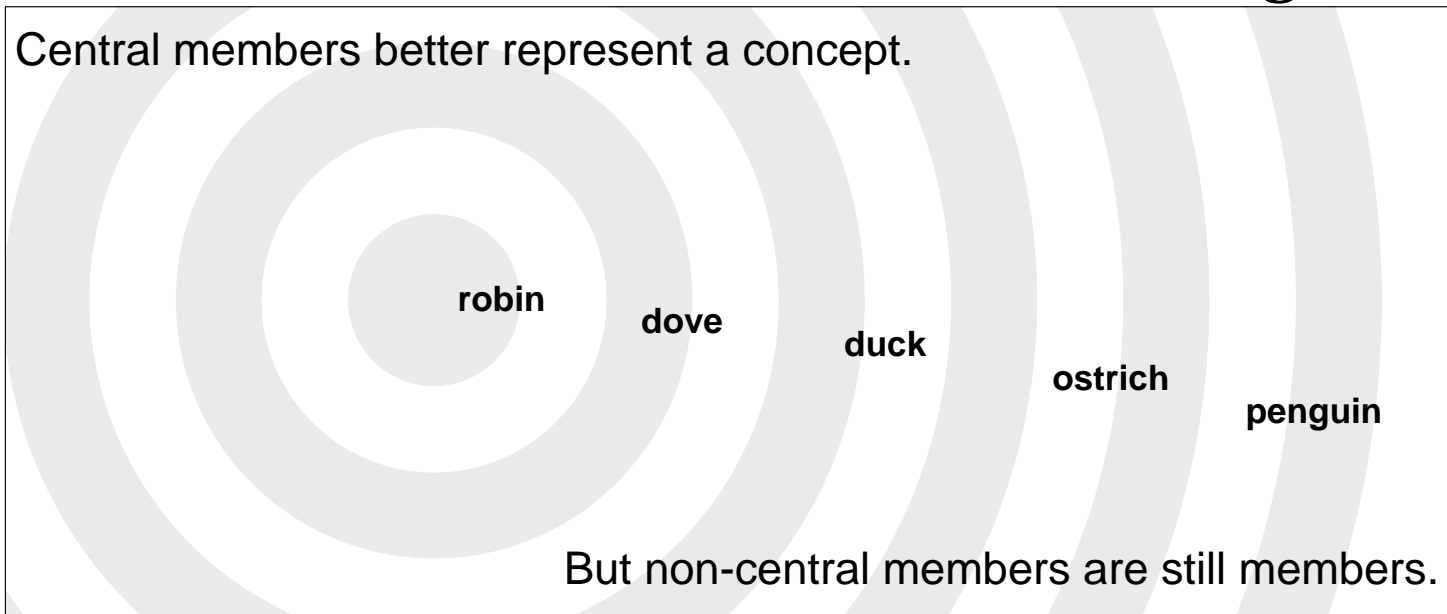
Roles

Content

Properties of
your concept:

Modern Categories

Central members better represent a concept.



But non-central members are still members.

For the concept you selected, describe central and non-central examples of the concept.

Your concept:

(circle one)

Workflow

Roles

Content

Example of a central member:

Example of a non-central member:

Requirements

In requirements analysis, observations are turned into rules.

The system shall...

These rules describe system behaviors.

Write the requirement that best describes the **central example** from the previous page.

The system shall

Write the requirement that best describes the **non-central example** from the previous page.

The system shall

Discussion questions:

Which example was more difficult to translate into a requirement?

What made it more difficult?

In your work, do you deal with more central or non-central cases?

How do you accommodate non-central cases?

First Conclusions

Content management concepts are typically conceived classically.

➔ Workflow

linear

required inputs

predictable outputs

defined contributions

👤 Roles

singular in purpose

goal-oriented

defined relative to other roles

defined relative to content

📄 Content

product of a process

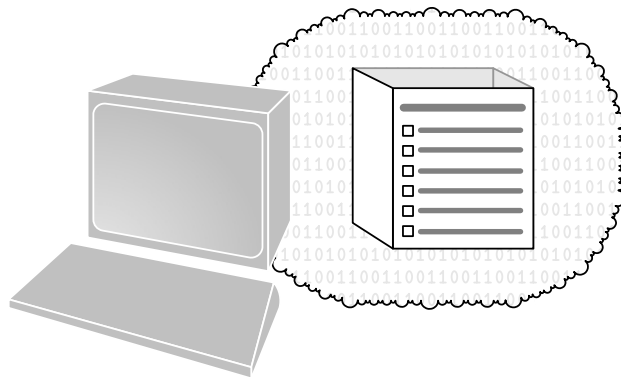
consumed by audience

chunkable data

structured for storage

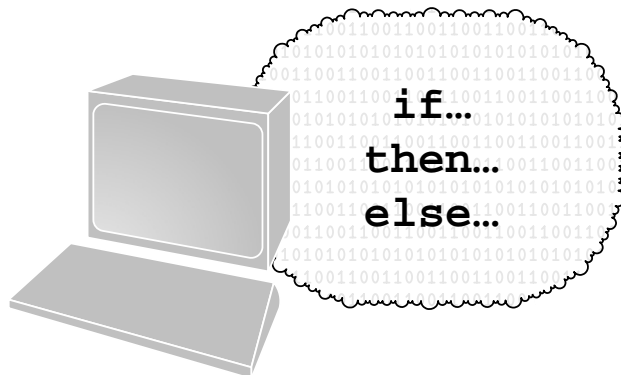
They do not address every situation, but they are easier to program.

Computers were constructed with built-in classical categorization.



Categories as buckets are easy to program.

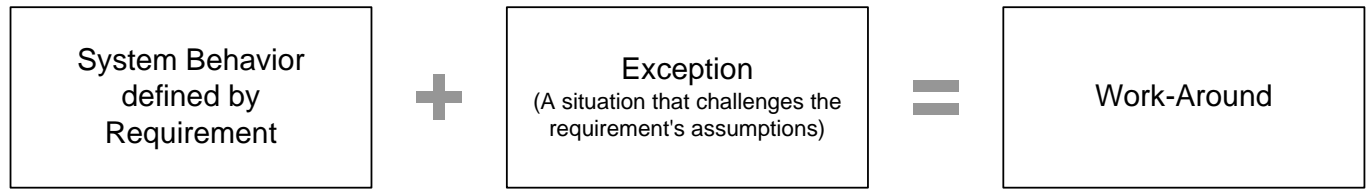
Computers address non-central cases with rules to handle exceptions.



But no rule can adequately address every situation.

How Computers Handle Exceptions

Every requirement makes assumptions.



Exceptions are situations that challenge assumptions.

Your concept:

(circle one)

Workflow

Roles

Content

The requirement:

Requirement's assumptions:

Current situation:

Work-around within the system:

Discussion questions:

Given system constraints, how would you address the situation?

If free from constraints, how would you address the situation?

Is it possible to design requirements without assumptions?

Can you accommodate every exception programmatically?

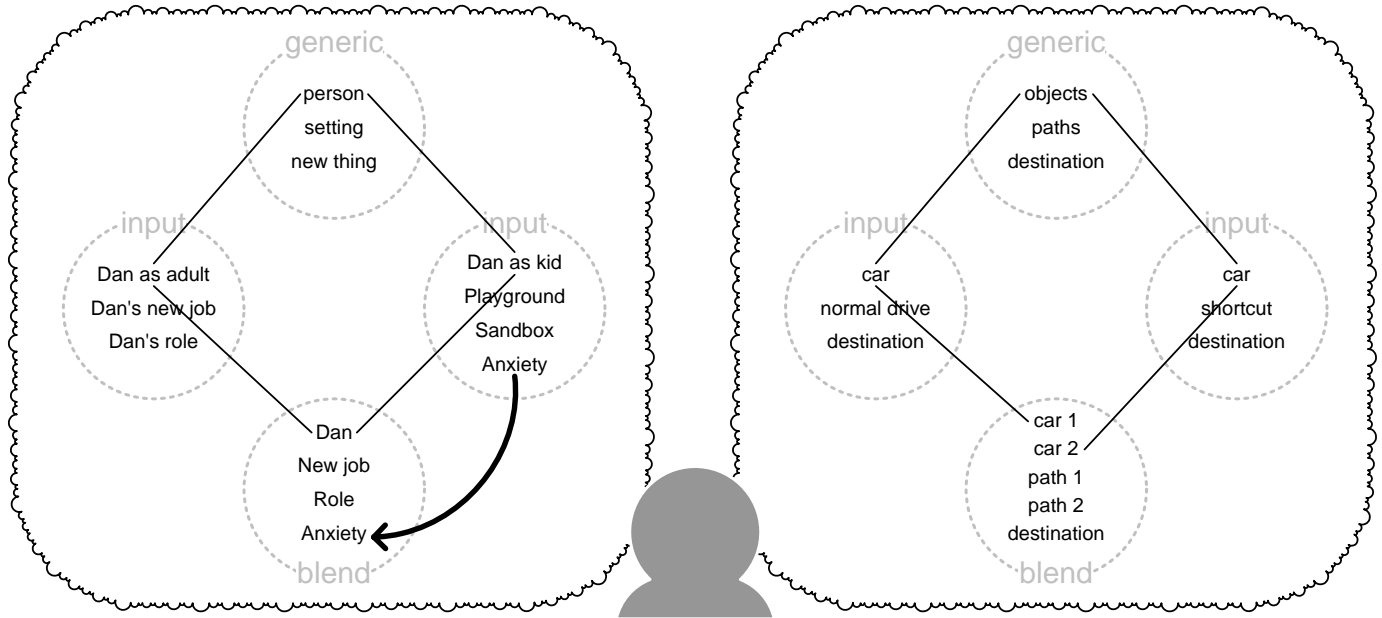
How Humans Handle Exceptions

Conceptual blending is a theory describing basic thought processes.

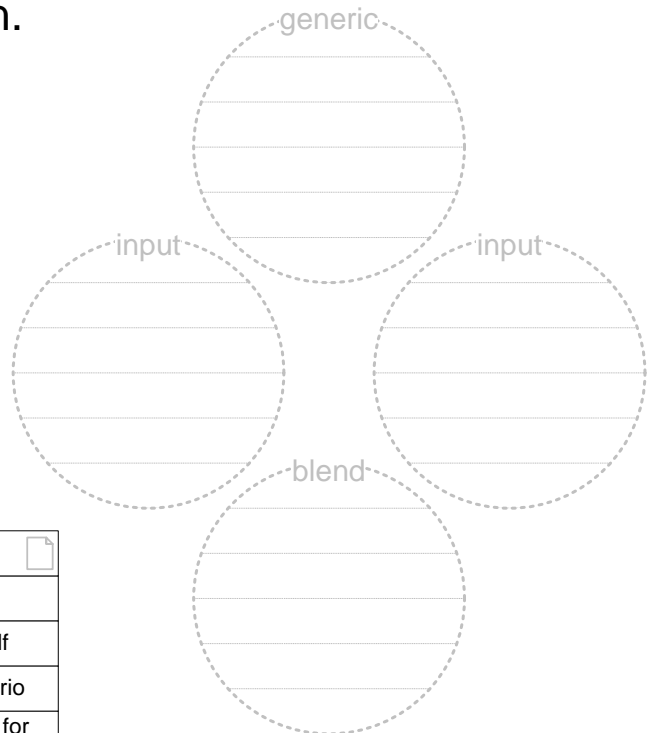
You: How's your new job?

Dan: When I was about two years old, my mom started bringing me to the playground. It took me two weeks to get into the sandbox.

I wonder which is faster, the normal way or the shortcut?



To handle exceptions, people blend the ideal situation with the current situation.



	workflow	role	content
generic	path-destination	container	part-whole
input 1	ideal path	typical tasks	content itself
input 2	person absent	person absent	search scenario
blend	temporary alternative process to accommodate absence	person takes on additional responsibilities	new structure for content to accommodate search scenario

Opportunities for Further Thinking

Find the source.

- > Where do these conceptions of workflow, role, and content come from? Why do we think about them in this way? What made these particular conceptions the ideal cases?
- > My hypothesis is that they are derived from a more fundamental conception of business as a factory. These conceptions of workflow, role, and content match perfectly with process, worker, and product.
- > If this is the case, the alternate conceptions of business may lead to other foundations for content management.

Business is...

a factory

Business is...

Business is...



linear process with distinct
inputs and outputs



defined by responsibilities, tasks,
and contributions to product



outputs, commodities, products

Build a better mousetrap.

- > So, does this framework give us a new way to approach content management? Is there a better way to design the software to support reality? As I see it, there are at least two possible strategies:
 1. Start with a new conception of business. Derive the concepts of workflow, role, and content from a different source, such that software is not grounded in limiting and inflexible cognitive models.
 2. Design a system that does not do any decision-making on behalf of the user. Humans are better decision-makers than computers, especially when it comes to complex situations. Instead consider how the computer can *support* decision-making by providing the necessary inputs.