CREVSCAPE

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- Background
- Hypothesis
- Notion, state, requirement
- Proposal
- Conclusion





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 - the need for formal metadata to allow machine understanding and therefore scalable operations;

Formal Metadata



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The R&D Process: CERIF-CRIS



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 - intelligent, hyperactive grey objects

Intelligent Hyperactive Objects

- Hyperactive combines both
 - hyperlinking
 - active properties of a (grey) object.
- Hyperlinking implies multimedia components linked to form the object and also external links to other resources.
- The term active implies that objects do not (only) lie passively in a repository to be retrieved by end-users. They 'get a life' and the object moves through the network knowing where it is going.





- This paper
 - Considers the importance of grey for the knowledge society
 - Takes an overview of the 'grey scene'
 - Proposes a way forward to achieve:

GREVSCAPE

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The Hypothesis

- Grey literature provides foundational material for knowledge transfer
 - leading to wealth creation and improvement of the quality of life, i.e. the 'knowledge economy'
- Currently the state of the art does not provide adequate ICT support
 - leading to a lack of documents in the repositories, lack of usage, lack of availability (interoperability)
- The Greyscape Architecture
 - solves the problems

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The Notion of Grey

- dull and dismal
- obscured
- between states Half-Empty

age and distinction

magical

Half-Full

These characterizations apply well to grey literature

The opportunity is to overcome the negative aspects, strengthen the positive and establish grey as the key to knowledge transfer for wealth creation and improvement in the quality of life

State of the Art

- X limited digitization (i.e. much on paper);
- X various repositories of material with different characteristics;
- X different standards for metadata to describe or catalog the material;
- X different query languages and capabilities;
- X differing facilities to present the results.
- X lack of integration with repositories of white literature, research datasets and software
- X lack of integration with CRIS which provide contextual information.
- X the different grey literature repositories commonly do not interoperate (or do not interoperate effectively).

Requirement: GL Object

- Easy to deposit
 - workflow, incremental metadata
- Easy to retrieve

 metadata, interoperability
- Easy to transition
 - grey to grey, grey to white
- Easy to track provenance
 - versions and relationships
- Easy to relate to
 - Other objects in the OA IR
 - CRIS
 - Research repositories

e.g. Technical paper Instructions Thesis Newsletter Brochure Ephemera Management paper Strategy Photographs Audio-visual

Example: Albert Einstein Photo



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Architecture - Compromise

- At this stage we propose to reject the hyperactive object notion (GL6 2006)
 - It is still research technology
 - It requires an e-infrastructure not commonly available
- And suggest to use technology commonly available
 - CERIF-CRIS
 - Formal metadata hence interoperability
 - Contextual information from CRIS
 - OA repositories
 - Grey (and other) objects available
 - Workflow system
 - Reduce threshold effort by incremental update



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....and multiple institutions

Note use of CERIF as formal protocol



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Stepwise Approach to Greyscape 1

- ✓ 1. excellent metadata (formalised DC)
 - \succ to improve discovery and control usage
- 2. an institutional document repository for grey

 \succ As well as white, to record IP of organisation

- \checkmark 3. an institutional CRIS
 - \succ for the contextual research information
- ✓ 4. linkage between the document repository and the CRIS of an institution

 \succ and thence to other institutions

✓ 5. an e-research repository of research datasets and software

 \succ To substantiate the hypothesis in the document

Stepwise Approach to Greyscape 2

- ✓ 6. linkage between the e-research repository and the CRIS of an institution
 - \succ and thence to other institutions
- 7. an institutional policy to mandate deposition of the material with appropriate metadata
 To manage the IP of the organisation
- ✓ 8. Information management, analysis and prediction services

 \succ for the CRIS and repositories

 9. Workflow processes to connect services and users

 \succ To reduce effort for user with data re-use

All in a GRIDs /ambient computing environment



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Conclusion

Now is the time for 'grey' to change its image from negative to positive and benefit wealth creation and improvement in the quality of life

A blueprint is proposed here to achieve:



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