

# **Dual-Development of the 2011 England and Wales Population Census Questionnaires**

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# Outline

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1. Options for multi-lingual questionnaire development
2. Previous England & Wales Censuses
3. 2011 Census dual-development
4. Results so far
5. The future.....

# Possible approaches to multi-lingual questionnaire development

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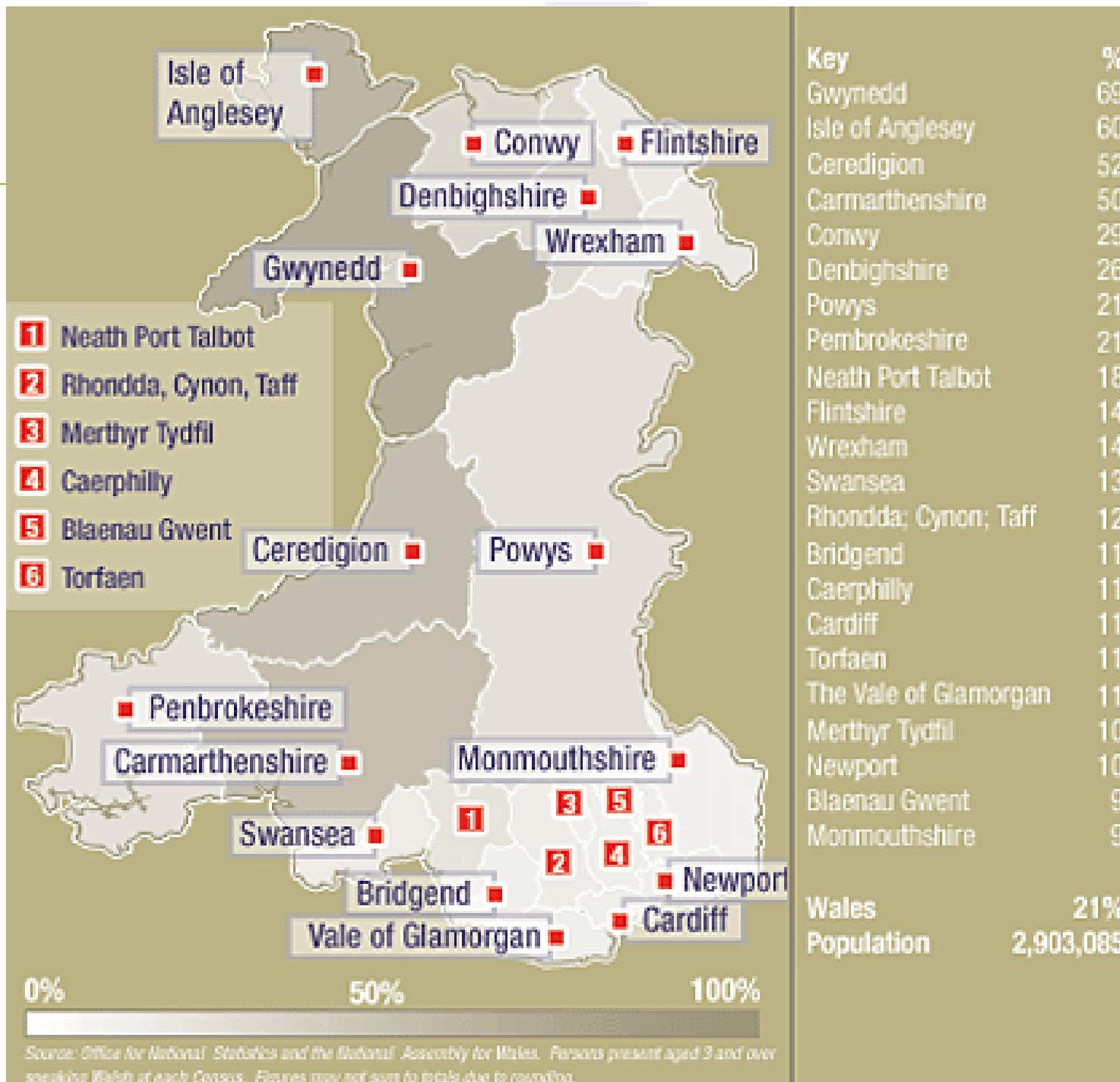
- Direct translation
  - Used most often around the world
  - Fast & cheap
  - No checks on validity or measurement error
- Back translation
  - Some say this improves validity – but questionable
  - No pre-testing
  - Translators can hide validity issues
- Dual-development
  - Parallel question development
  - Pre-testing in both languages
- Others:
  - Harkness (2008): Iterative team translation model, TRAPD
  - Werner & Campbell (1970): Decentering model



# Context for dual-development

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- Total Wales population estimated at 2,980,000 (2008, MYE). 21% speak Welsh (2001 Census)
- 57% of Welsh speakers considered themselves fluent (WLUS 2004)
- Welsh is spoken as a first language by some people in all regions of the country and dialects vary across regions
- Welsh Language Act (1993) put Welsh and English on an equal basis in public life in Wales.



# Census in Wales through the ages....

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- A Welsh language Census questionnaire has been used in Wales since 1841
- 1993 Welsh Language Act created legal requirement to provide Welsh Language Census questionnaire
- ONS then used Census field procedures as a model for conducting other surveys in Wales
- For the 2001 Census, ONS continued its existing practice of translating the finished English questionnaire into Welsh

# 2011 Census – why change?

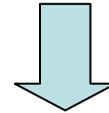
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- Decision made after 2007 Census Test to improve methodology
  - Welsh Assembly identified some comprehension issues with the 2007 test Welsh language questionnaire
  - Similar issues were identified (in hindsight) for 2001 questionnaire wording
  - ONS methodologists working on English questionnaire were ex-NZ and experienced in bilingual developments
  - NZ dual-development approach was adopted for the Welsh development

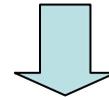
# Standard questionnaire development process for official statistics

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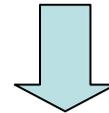
Develop measurement concepts & survey information needs



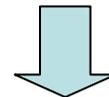
Develop questions



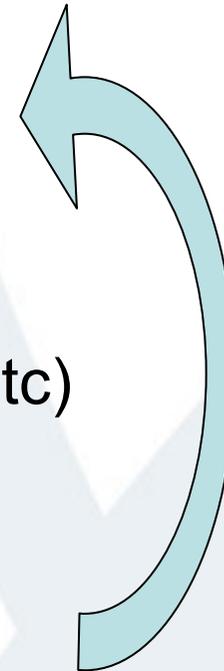
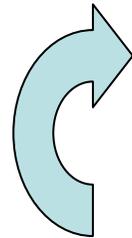
Qualitative pre-testing  
(cognitive interviewing, etc)



Expert review

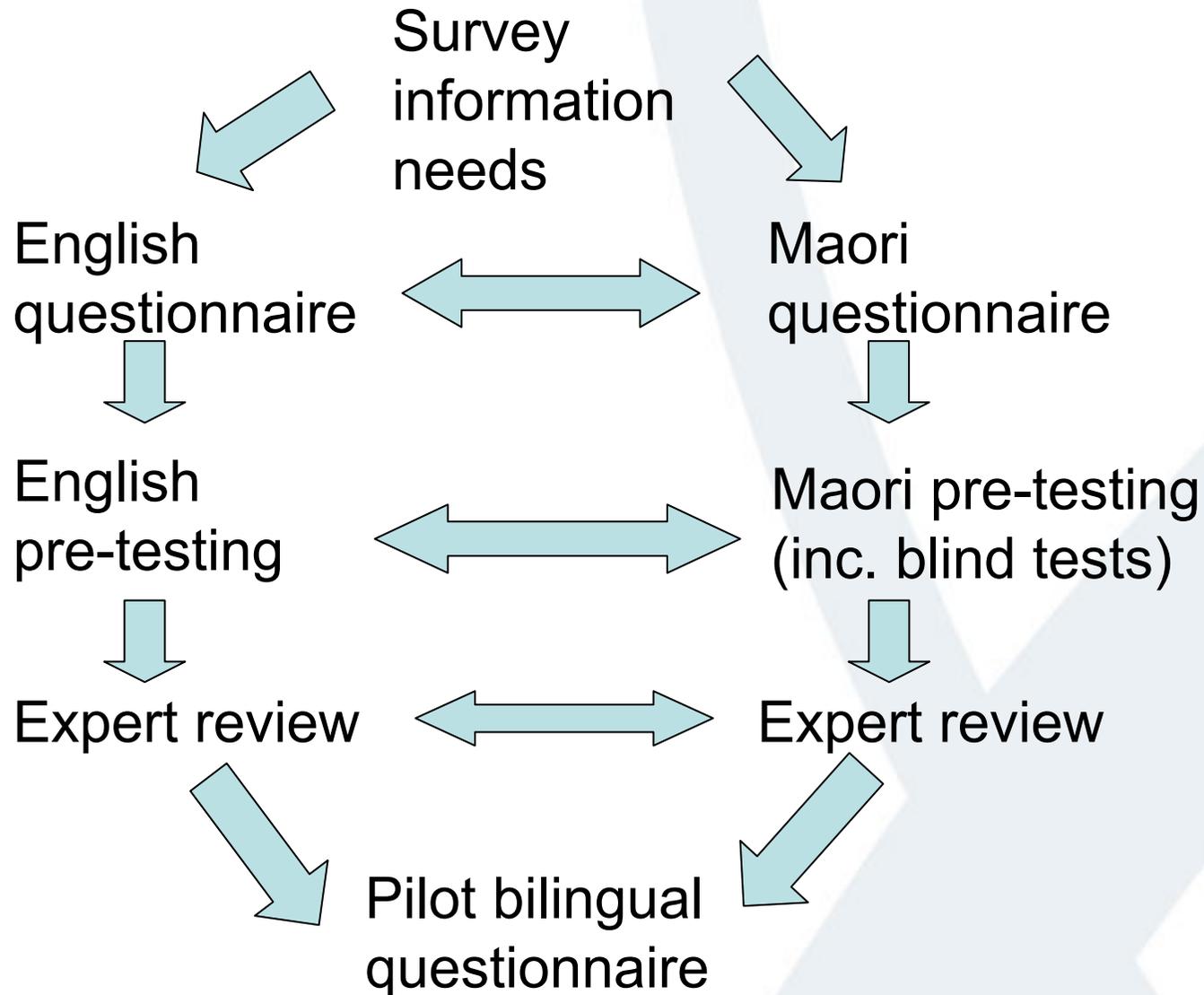


Pilot questionnaire

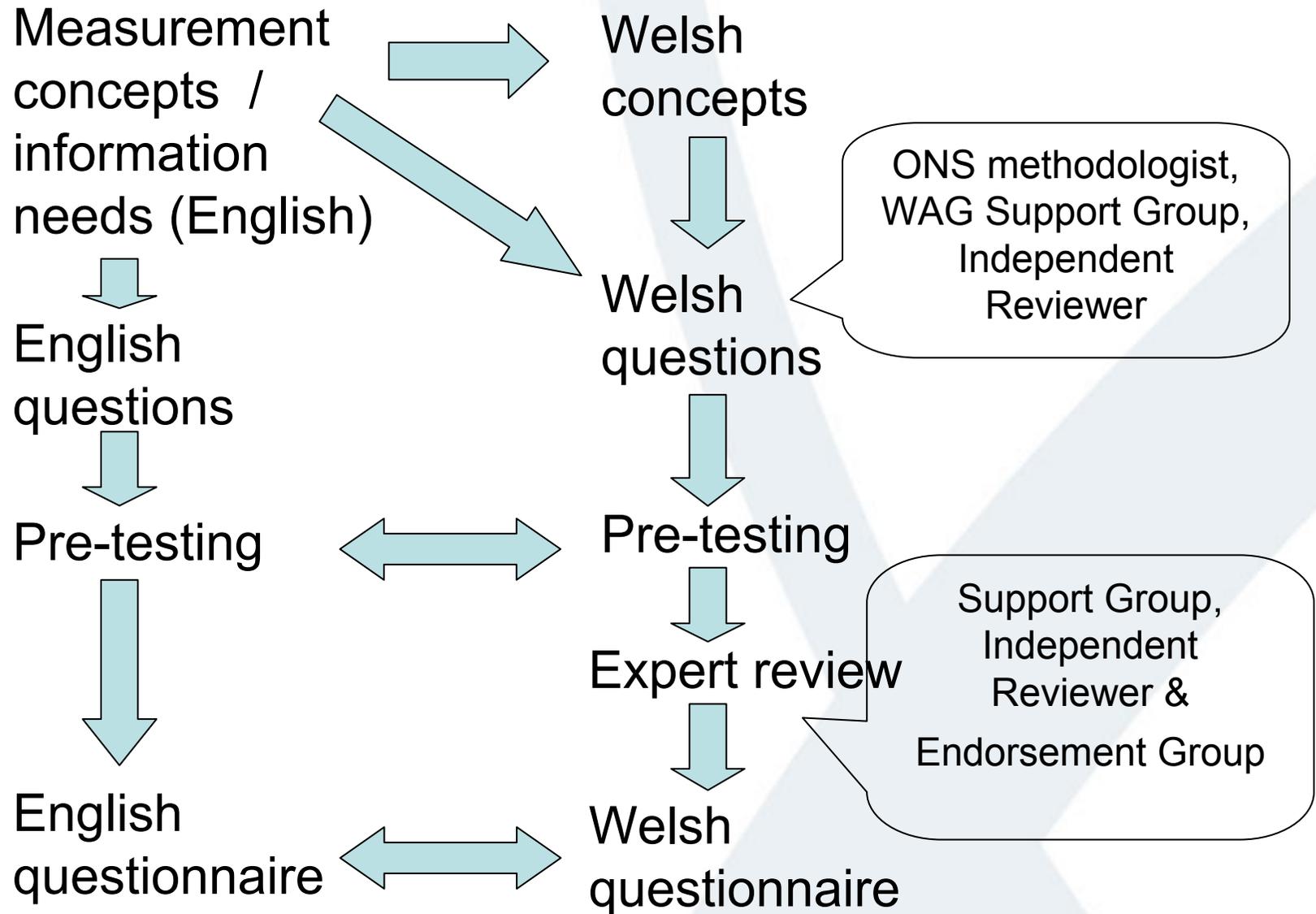


# NZ dual-development approach

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# Welsh development process: Conceptual translation vs literal translation



# Conceptual equivalence issues

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- Legal marital status:
  - English: Surviving partner from a same-sex civil partnership
  - Welsh: Lost a same-sex civil partner through death
- Highlighting issues with English question concepts:
  - English: Temporarily laid off
  - Welsh: Released from work temporarily
- Definition of Household:
  - ‘Cartref’/’aelodau o’r cartref’ (home – referring to a place/ members of the home) used since 1991
  - Welsh Assembly Government has adopted another term ‘aelwyd’ (household) for legal purposes
  - Pre-testing showed this new term unfamiliar to Welsh householders

# Welsh pre-testing

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- Two waves of cognitive interviewing by ONS
  - Wave One: 20 respondents (October 2007)
  - Wave Two: 14 respondents (June 2008)
- Two bouts of cognitive interviewing by Welsh Assembly
  - Use of colour labels in Ethnicity question
  - Alternative questions and question orders for Wales
- Census Rehearsal (2009) will be the first pilot

# Biggest practical challenges

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- Getting a stable enough version of the English questionnaire to create the next version of the Welsh questionnaire
- Welsh versions always run a few weeks behind English versions
- Review-by-committee is time consuming
- Less resources available for Welsh development than English:
  - Welsh development team has one DCM methodologist, compared with 3-5 in English development team
  - two waves of testing for Wales vs 6 Waves for English version
- **CRITICAL:** must have skilled bilingual methodologists

# Biggest successes

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- First dual-development & moving towards a parallel development
- Identified and reduced measurement error
- Improved the comprehension of the questionnaire
- Increased collaboration with Welsh Assembly
- Perhaps this approach will provide a new model for development of other ONS surveys in Wales.

# Questions?

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**Potaka, Lyn, & Cochrane, Suzanne (2004) Journal of Official  
Statistics, Vol 20, No. 2, pp 289-300**

<http://www.jos.nu/Articles/abstract.asp?article=202289>

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# Welsh development governance & review process

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- Data Collection Methodology – question development & testing
- Support Group & Independent Reviewer
- Endorsement Group
- UK Census Questionnaire Design Working Group
- Office for National Statistics National Statistician & Welsh Assembly Government Chief Statistician
- Welsh Minister for Finance and Public Service Delivery (cc First and Second Ministers)

# England & Wales Census cognitive testing programme

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- Phase 1: question development & testing for 2007 Census Test
- Oct 2004 to Apr 2006
  - The questions tested were developed using:
    - 2001 Population Bases and Definitions questions
    - ONS' harmonised questions
    - new user requirements
- A range of respondents were interviewed to ensure all criteria of interest were covered. In total:
  - 56 interviews
  - 2 focus groups.

# England & Wales Census cognitive testing programme

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- Phase 2: development & testing for Rehearsal
- Jan 2007 to Aug 2008
  - New format testing questions in context of the whole questionnaire
- Five waves of cognitive testing:
  - Wave 1: 23 respondents (Nov 2006 - Jan 2007)
  - Wave 2: 69 respondents (Apr & May 2007)
  - Wave 3: 77 respondents (Jul – Sept 2007)
  - Wave 4: 27 respondents (Oct & Nov 2007)
  - Wave 5: 47 respondents (Jan – Mar 2008)
  - Wave 6: 32 respondents (Apr – July 2008)
  - Wave 7: 10 respondents (Mar 2009)
- Whole-of-questionnaire testing (Mar – Jul 2009)