

# Aging – Coming your way sooner or later

## Social Exclusion - Informed Reality Thinking on Accessibility and Mobility in an Aging Population

### A perspective on western societies



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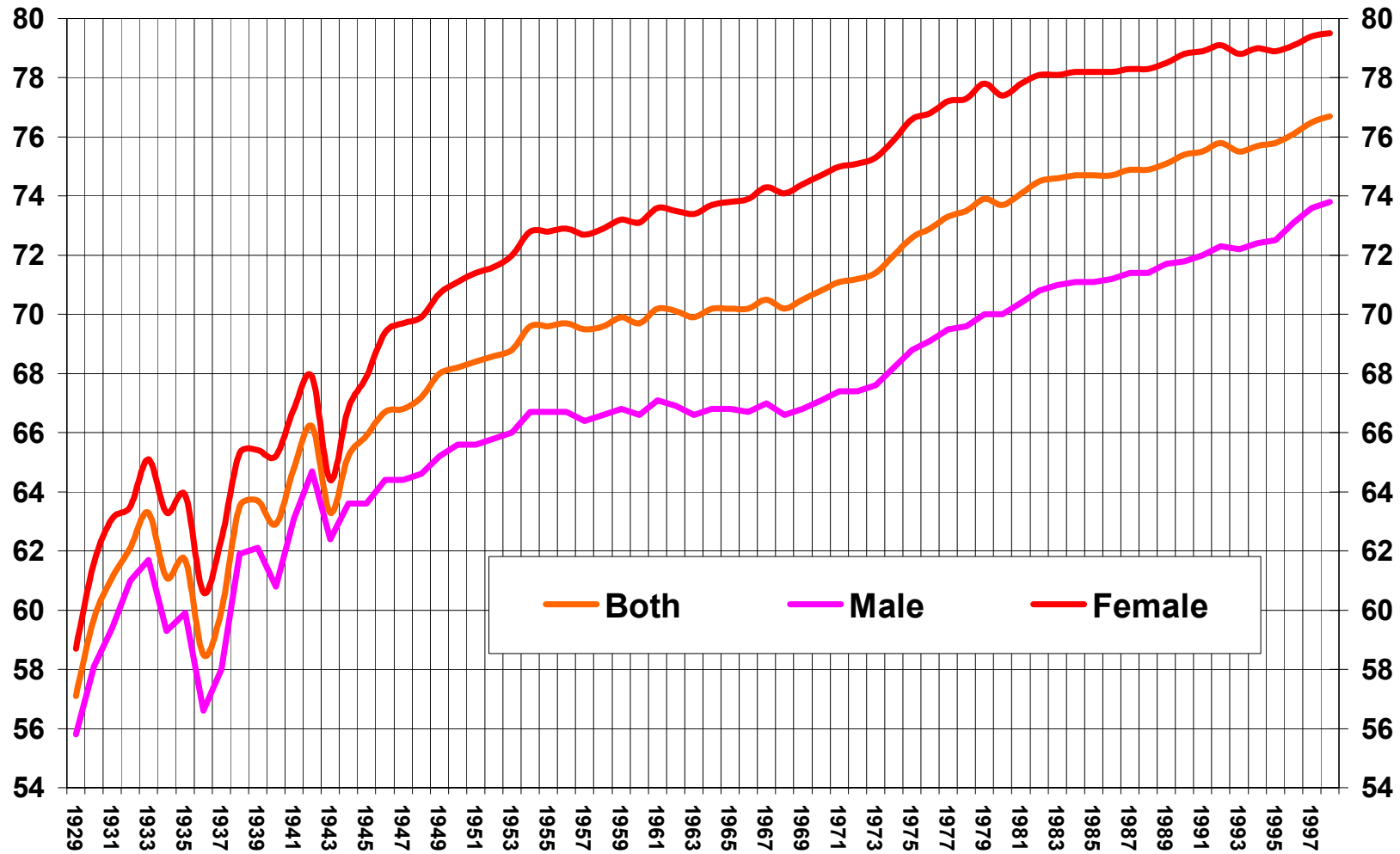


## ***Aging: The Coming Rapid Growth in Elderly Population is “Inevitable”***

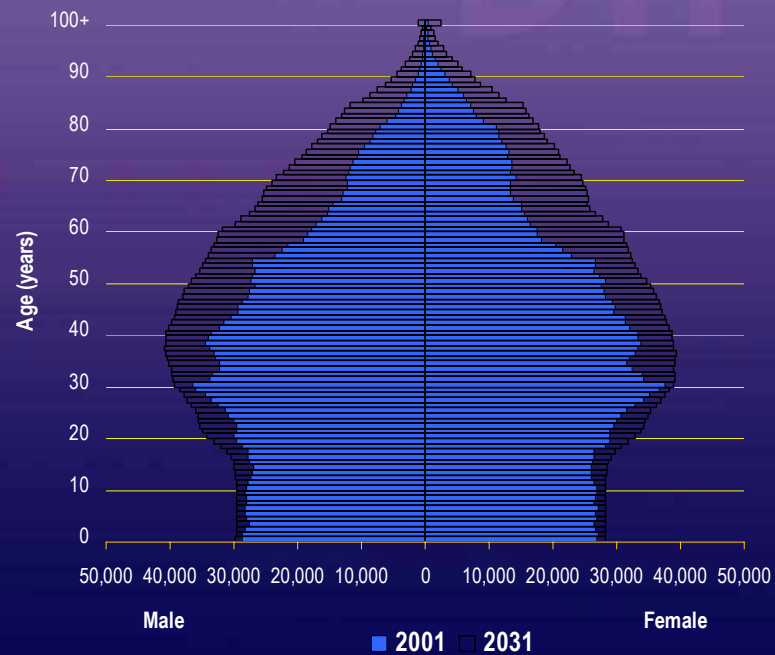
- Population aging is primarily due to:
  - Decline in fertility rate
  - Increase in life expectancy
    - ↳ Linked to some extent to well being and prosperity



# Estimated Life Expectancy at Birth



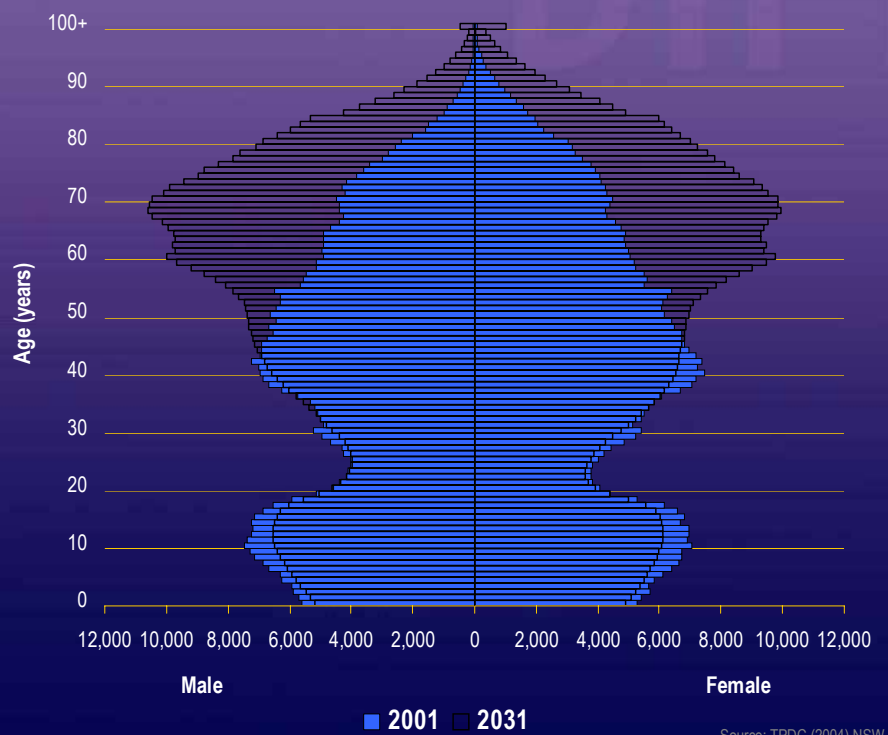
# Age and gender, Sydney



Source: TPDC (2004) NSW State and Regional Population Projections



# Age and gender, coastal NSW



Source: TPDC (2004) NSW State and Regional Population Projections



## ***Aging: The Coming Rapid Growth in Elderly Population is “Inevitable”***

### ■ Challenge:

- By encouraging "lifelong mobility" the OECD says,
- “governments can enhance old people's independence and quality of life, while benefiting from lower public health and program costs.”
- Delivering vitality in life



## A sense of fulfillment indicates the vitality of elderly people: A Japanese View

- Vitality is understood to be the keenness one feels about one's daily life, or the extent to which one feels life is worth living.
- Improving mobility will improve the vitality of elderly people by increasing the frequency of their outings.
- A public policy of ensuring a minimum level of mobility should be promoted further by developing transport policies that improve the vitality of all people in society.
- It has doubtlessly been assumed that, in every case, transport for the elderly means public transport, but we should think of seniors' use of their own cars not as something that is simply inevitable, but as a new trend that offers a number of advantages (see later slide).
  - *TO AVOID/MINIMIZE social disadvantage*
- Ref: Barrier-Free Access to Transport Can Improved Mobility Raise the Elderly's Sense of Fulfillment? Hitoshi Ieda and Yasuyuki Muraki



# A Crucial Myth

- The majority of the elderly have fewer mobility needs than the rest of the population
  - *Response:* seniors also have unique transportation needs
    - ☞ they may require more trips to the doctor and for other forms of medical attention which add to the number of trips they make.
    - ☞ The reality is that the transportation needs of the elderly are just as significant as those required of younger, non-retired populations.
    - ☞ Add to that the increased need for transportation options for those whose age or physical condition make it impossible for them to take advantage of traditional forms of public transportation,
      - and the transportation issues facing the elderly take on even greater significance.
    - ☞ Just getting out and about is of immense benefit
- Watch the Grey/Silver white Power Space



# USA 2005 Proclamation

*Ensuring transportation options for **older Americans** emerged as one of the top three issues (out of 73) considered by delegates at the recent fifth White House Conference on Aging in Washington.*

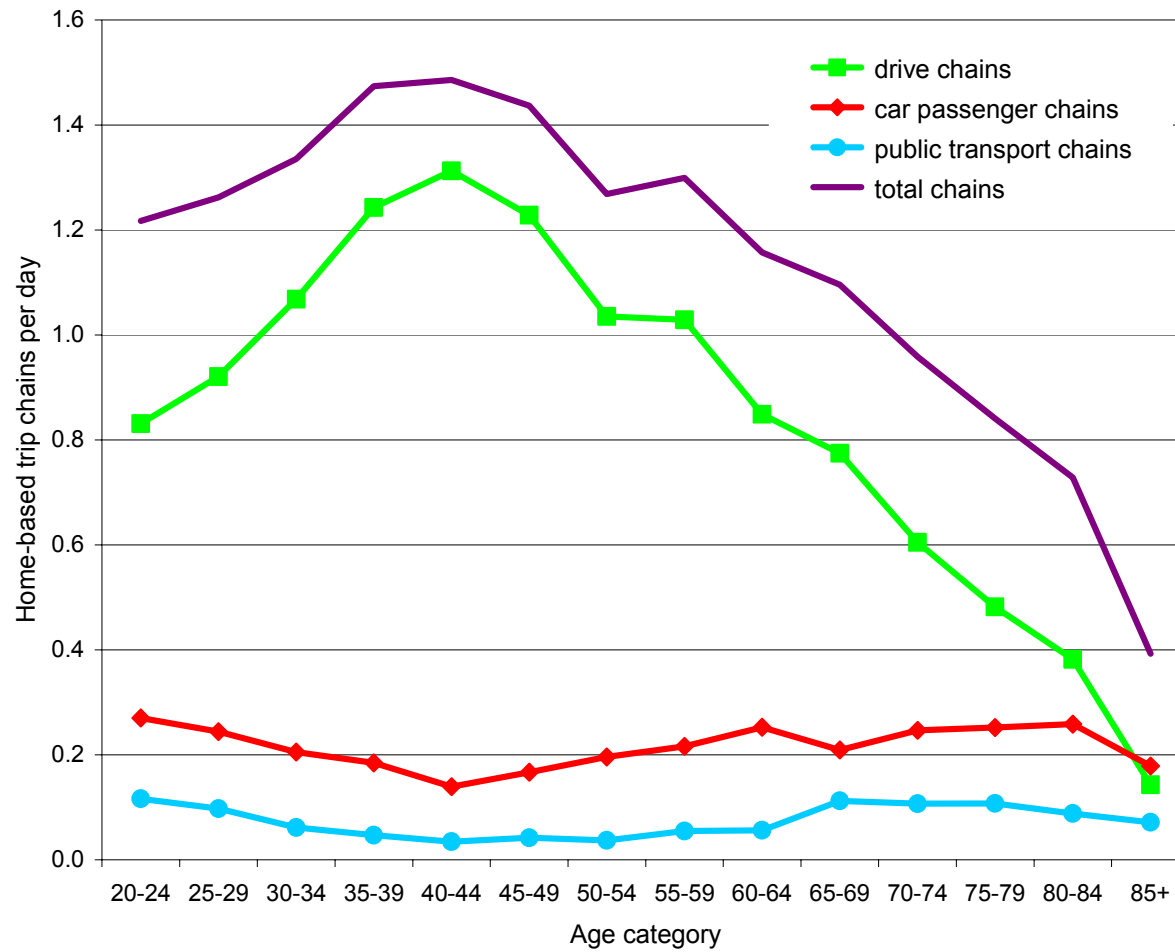


# Links to Travel Activity

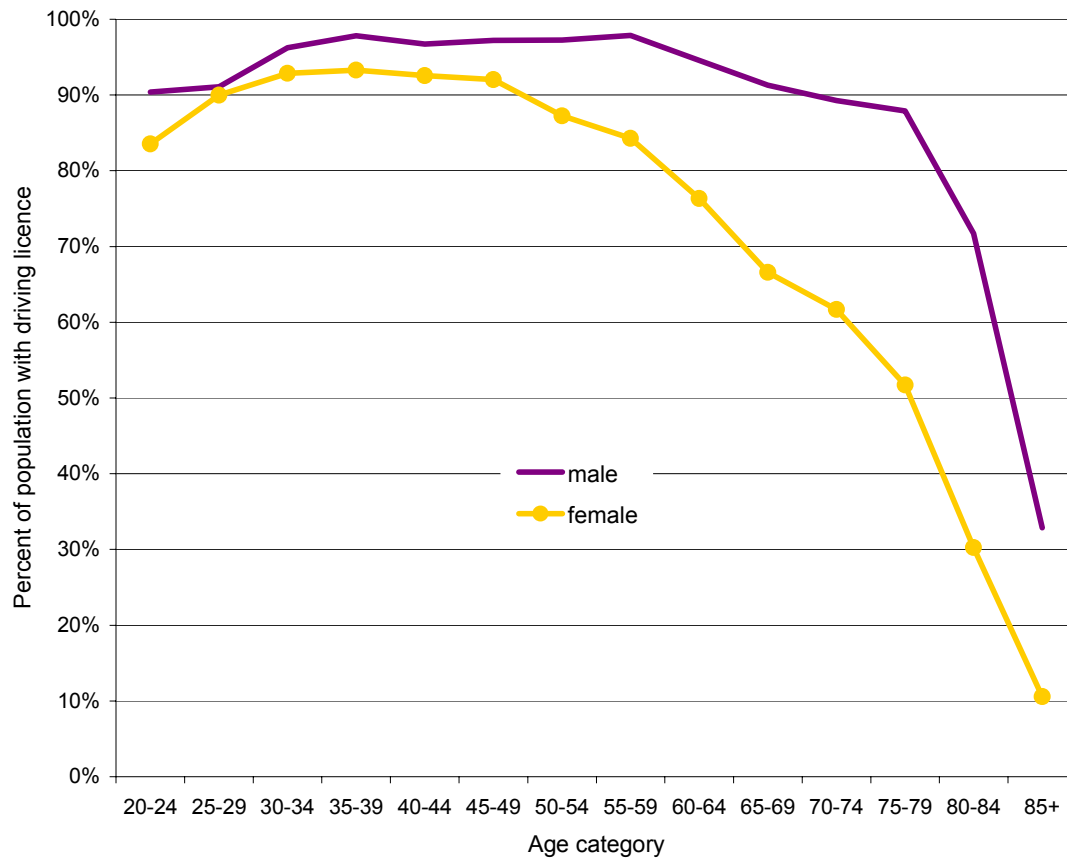
Examples in Sydney  
2000-2003



## Average home-based trip chains per day by age and mode



# License holding by age and gender



# Issues that are Facts about Seniors of the Future

- By and large, the population will age substantially but **differ** from the elderly of today in certain respects
- The elderly will have experienced social change and will be used to claiming their rights, which will foster a more participative form of democracy
- Those among the elderly who are not wholly reliant on state pension schemes will enjoy relatively high incomes
- They will be car users (**DRIVERS or PASSENGERS**) in the main.
- A high and increasing proportion of women too will hold driving licences, which is not always the case today.
- *There is **no point in extrapolating from current trends, because future developments will be on a new scale.***



## Issues that are 'Facts' about Seniors of the Future (with extensive car ownership and use)

- The death of a husband (typically earlier than spouse) who is the only member of a couple to have a driving licence can pose particular problems.
  - here, socially inclusive transport solutions will have to be found for people who are still able-bodied but do not drive.
  
- **So it is important to begin devising**
  - solutions that tap the potential of new technologies to rationalise services,
  - especially since conventional public transport will be unable to cope efficiently with an ageing *suburban* population.
    - ☞ Walking to bus and train up a steep hill
    - ☞ Roughness of many streets without footpaths



# Issues that are 'Facts' about Seniors of the Future (with extensive car ownership and use)

- Public transport operators are still, in the main, unaware of the aging challenge and what it entails.
  - For instance, while public transport signage may be adequate for younger people, it will not be for the elderly.
- Infrastructure development will have to take into account the large number of elderly people, who are particularly at risk when travelling.
  - It will therefore be important to increase staffing on public transport and at PT interchanges.
  - Play classical music to scare trouble makers away!
- Encouraging walking (and good diet) at all ages will increase the health of aging people and
  - make alternatives to PT such as the car a longer term mode to give flexible accessibility;
  - HOWEVER there is a counter view about car dependence encouraging obesity, a factor which reduces mobility and life expectancy



# The Car as key element in Social Inclusion

- **Services to the home will not suffice**
  - It will be important for the elderly to have a social life, including visits to friends, and this will involve travel.
  - Enabling the elderly to live like other people, even if special services are required, will help to keep them happy.
- **Driving life will be extended** as innovation-led improvements are made in cars and driving aids.
- Because the elderly have slower reactions than those of working age, road safety will also be a growing concern.
- **Criteria will have to be found to judge a person's ability to drive**, even if the elderly tend to decide to drive less of their own accord
  - *Linked to policies on social inclusion/exclusion*



# A Big Point

To minimise the greater dependence on inadequate PT leading to social disadvantage

- As the number of elderly people in developed economies increases, more individuals are likely to want to continue driving cars as their main means of transport (given their well being and financial status).
  - Cars must be made easier for older people to drive. To ensure they can drive safely, there must be changes in vehicle design, including:
    - ☞ improved access to seat belts among older people with physical restrictions
    - ☞ improved safety features to protect occupants, pedestrians and cyclists
    - ☞ wing mirrors and other rear view capability given the difficulty in moving one's neck left and right
    - ☞ compulsory power steering
    - ☞ compulsory distance warnings re side swiping, reversing, parking.
    - ☞ In-vehicle signage equivalent to 'Baby on Board' (maybe 'Baby Boomer on Board'?)
  - Roads and pavements should be better adapted to the needs of the elderly, including
    - ☞ Larger signage with less but crucial information (given processing abilities)
    - ☞ Much better road marking to distinguish lanes
    - ☞ ATIS/ITS signs that assist the elderly in avoiding specific road links and routes that are 'more challenging'.
- However, Flexible public transport systems suited to older passengers must also be developed as alternatives to the private car
  - ☞ But DO NOT assume it will be a major 'solution' to mobility and accessibility needs



# Japanese Recommendations

(so people can get out and about more easily)

- Roads should be constructed to permit greater sight distances,
- The government should restrict billboards and other advertising that tends to obstruct views of traffic signs and signals.
- To make driving easier, cars should be computerized to a greater extent,
- Cars should have fewer blind spots,
- Mirrors should offer better vision, and
- Instrument panels should be made easier to see.



# The Elderly as Pedestrians in the Road Environment

- Walking in the road environment is dangerous for the Elderly
- Injury rate not greatly different from other age groups
  - excluding the very young

BUT

- Fatality rate is much higher, especially for males
- Thus there is a need for more attention to urban design for safe walking
  - The Bogota position – make it safe for children and it will be safe for everyone, including seniors



# Japanese Recommendations

(so people can get out and about more easily)

## – PT needs improvements include:

- ☞ further installation of elevators and escalators in stations;
- ☞ renovations that make it possible to walk without stepping up or down;
- ☞ signs that are easy to read and understand and that maintain uniform standards, making recognition easy for people who transfer between different transport modes or different operators;
- ☞ information services that make transport systems easier to use;
- ☞ better rest areas within the transport system; and
- ☞ lowering of vehicle floors to platform levels.



# Driving Tests: Compulsory or Mandatory?

(Social exclusion impacts typically ignored if ones fails an annual driving test)

## OECD View:

- Rather than imposing mandatory driving tests once people reach a certain age, the OECD recommends community-based assessments involving doctors, police and social services, as well as the family and friends of older drivers.
- At the same time, they argue the need for a better approach to assessing and responding to the disabilities that can hamper safe driving.
- My suggestions (at least):
  - A larger array of graded licences



# The Facts

- But, providing transportation alternatives for the elderly is not just a matter of public safety.
- In many cases, otherwise active seniors lack private transportation, either because they never learned to drive, or, because they cannot afford a car.
- Even more important, mobility is critical to the emotional well-being of people of all ages, and continued interaction with family, friends, and the larger community is a key ingredient in maintaining the psychological health of our aging citizens.
- That interaction is made easier when acceptable transportation alternatives are available.



# But as You age



Thank You



# The Future

"It's a bright, sunny Spring morning in Eugene, Oregon as you head off to work. Three blocks from your home is a Lane Transit District BRT stop. You check your wireless Handspring PDA to see when the next "train" is scheduled to stop. LTD's wireless information system assures you that the next "train" is only three minutes away. You check your watch. It's 7:24 am. At precisely 7:27 am, the inbound commuter "train" pulls into your stop. Extra wide doors open and a couple people get out. You step aboard the low floored vehicle, point your Bluetooth-equipped PDA at a similarly-equipped ticket counter device. You electronically transfer the price of your ticket and take a seat. Swiftly, quietly, without a wisp of pollution, the rubber-tired, articulated bus heads for the next stop, unobstructed by other traffic because it operates on its own dedicated lane system like that envisioned in this 3D computer rendering, courtesy of LTD. Exactly 18 minutes later, you arrive at your stop, just two blocks from your place of work. The ride has been smooth, quiet and trouble-free. You have even had time to check your email. This scenario may soon become a reality,- at least the Bus Rapid Transit aspect, if not the wireless ticketing part. [Lane Transit District](#) is on track to become one of the first communities in America to introduce the next generation of BRT in the form of the Irisbus Civis electric bus. (Bill Moore, Eworld, March 31, 2001)

