

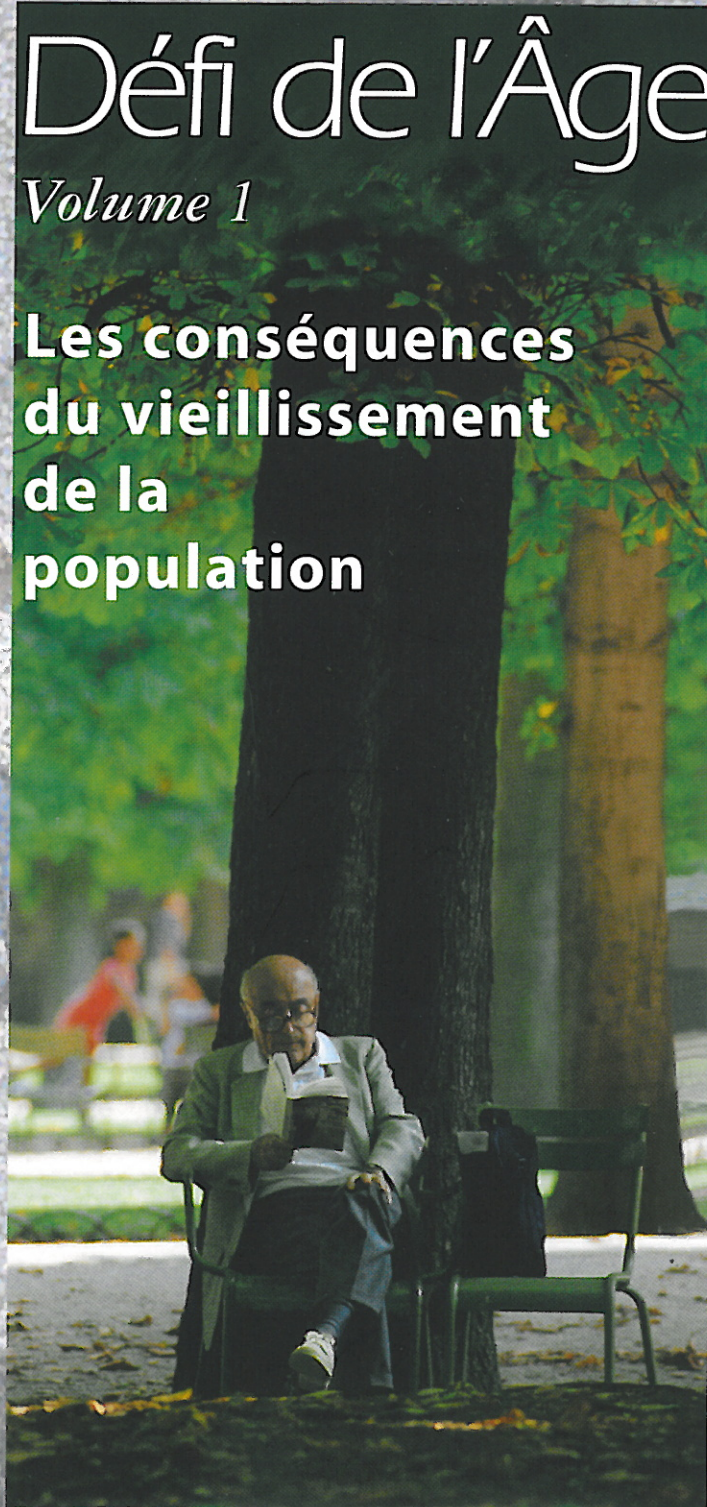
# LES CAHIERS

DE L'INSTITUT D'AMENAGEMENT  
ET D'URBANISME  
DE LA REGION D'ILE-DE-FRANCE

## Le Défi de l'Âge

*Volume 1*

**Les conséquences  
du vieillissement  
de la  
population**





**INSTITUT D'AMÉNAGEMENT  
ET D'URBANISME  
DE LA RÉGION D'ILE-DE-FRANCE**

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## « La révolution de la longévité »...

*Signe des temps : les Franciliens s'enracinent en Ile-de-France ! De plus en plus de jeunes y naissent et y vivent alors que les plus âgés partent moins fréquemment vers la province à l'heure de la retraite...*

*Une tendance que devrait renforcer au cours du prochain demi-siècle l'augmentation sans précédent d'une population « âgée » —son doublement d'ici 2050—, mobile, en bonne santé, plus urbaine et détentrice d'une part importante du pouvoir économique.*

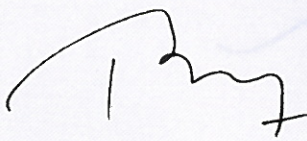
*L'Ile-de-France va ainsi s'inscrire sans surprise dans le processus du vieillissement national et c'est l'image même de la vie dans la région-capitale qui pourrait en être modifiée, de façon peut-être moins prononcée qu'ailleurs.*

*En matière de retraite, de nombreuses questions demeurent ouvertes. Elles concernent la qualité de vie des personnes âgées et le maintien de leur autonomie, le logement et l'accompagnement mais aussi l'âge du départ en retraite, son mode de financement et le pouvoir d'achat des pensionnés. L'espace des possibles demeure très large et le débat est plus que jamais indispensable. Dans le domaine de la santé aussi, les effets prévisibles sont loin d'être évidents, l'âge n'étant pas, en lui-même, une mesure de l'état de santé.*

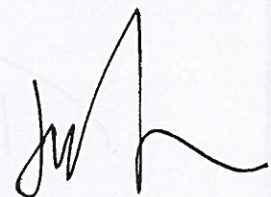
*En 1997, l'Iaurif a initié une réflexion prospective sur le nombre croissant des personnes de 60 ans et plus dans notre société et sur ses effets en matière de retraite, de services, de déplacements, de loisirs... Cette réflexion a permis de rassembler les contributions de médecins, de chercheurs et d'acteurs de l'aménagement.*

*Les premiers résultats de ces travaux, présentés dans les n°121 et 122 des Cahiers de l'Iaurif, confirment que la « révolution de la longévité » aura bien des conséquences susceptibles d'affecter le fonctionnement de notre agglomération dans les domaines-clés que sont la santé, les transports, le logement et, plus généralement, les équilibres démographiques et économiques et les modes de vie.*

*Mais l'avenir n'est pas écrit. Il apparaît même beaucoup plus ouvert qu'on ne l'imagine souvent... et pour une large part entre nos mains.*




**Francine Bavay**  
Vice-présidente chargée  
des solidarités, de l'action sociale et de la santé

**Jean-Paul Huchon**  
Président du Conseil Régional  
d'Ile-de-France

## “The revolution of longevity” ...

*The sign of the times: residents of Ile-de-France are settling in the region! An increasing number of children are born and live there, while the most elderly move less frequently to the provinces upon retirement. ...*

*Over the next half century, this trend should reinforce the unprecedented increase (it should double by the year 2050) of an “elderly”, mobile, healthy and more urban population that holds a significant part of the economic power.*

*Not surprisingly, Ile-de-France will thus join the national ageing process. This may change the very image of life in the capital-region; a change that will perhaps be less pronounced than in other parts of the country.*

*Concerning retirement, many questions remain unanswered. They involve the quality of life of elderly persons and the preservation of their autonomy, housing and accompaniment as well as the age of retirement, its financing and the purchasing power of pensioners. There are many possibilities and, more than ever, debate is indispensable.*

*Predictable effects are also difficult in the health sector, as age is not in itself a measurable factor of health conditions.*

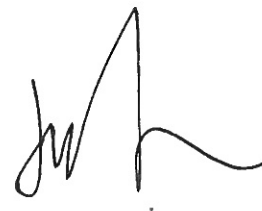
*In 1997, the Iaurif initiated a prospective reflection on the increasing number of persons 60 and over in our society, and on its effects on retirement, services, transports, leisure activities, etc. This initiative brought together observations from doctors, researchers and actors in urban development.*

*The initial results of these studies, presented in n°. 121 and 122 of the Iaurif “Cahiers,” confirm that the “revolution of longevity” will give rise to a number of consequences likely to affect the functioning of our agglomeration in key sectors such as health, transports, housing and, more generally, demographic and economic balances and life styles.*

*However, the future is not written in stone. In fact, it seems to be much more open than we often imagine... and for the most part, the future is in our hands.*



**Francine Bavay**  
Vice-president in charge of  
solidarity, social action and health



**Jean-Paul Huchon**  
President, Regional  
Council of Ile-de-France

# Vieillissement de la population : entre évidences et interrogations

**É**vidences.

On le sait, les démographes l'ont longuement souligné, la France — comme les autres pays industrialisés — va connaître au cours des prochaines années un vieillissement sensible de sa population, c'est-à-dire une augmentation et du nombre et du poids relatif des personnes «âgées» dans l'ensemble de la population française. Les effets induits par ce phénomène sont jugés suffisamment préoccupants pour avoir suscité à la fois nombre de travaux et de cris d'alarme depuis plusieurs décennies.

Alors, pourquoi s'intéresser une nouvelle fois à ce phénomène ?

Et pourquoi en Ile-de-France ?

Deux raisons principales à cela.

La première est que

**l'avenir n'est pas écrit.**

L'ampleur même du vieillissement, par exemple, est objet de débat.

Sur le plan quantitatif d'abord.

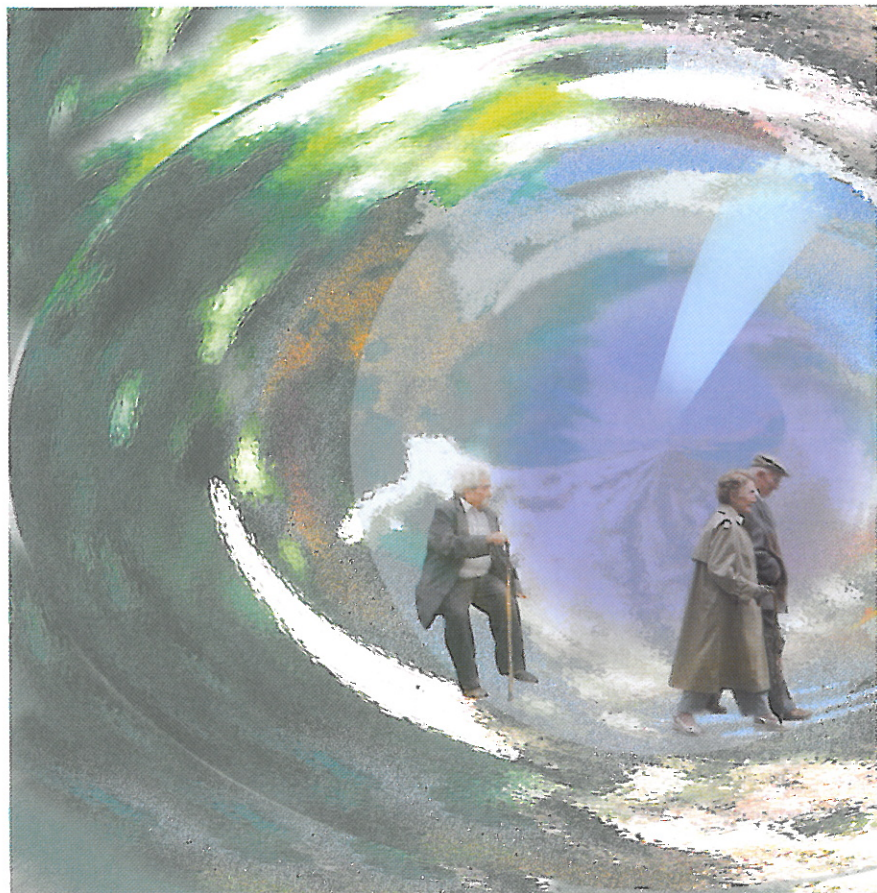
Certains jugent l'hypothèse d'une espérance de vie qui continue de s'accroître trop «optimiste», en particulier chez les femmes — dont les comportements ne cessent de se rapprocher de ceux des hommes.

D'autres, en revanche, la jugent trop «frileuse», eu égard aux progrès envisageables de la médecine ou aux recherches en cours en biologie moléculaire et à leurs conséquences possibles sur le recul de l'âge limite de la vie humaine.

Ce débat n'est pas neutre puisqu'il a conduit l'Insee à accroître de 3,5 millions le nombre de personnes de 65 ans ou plus envisagé pour la France à l'horizon 2020 entre ses simulations de 1979 et de 1994.

Sur le plan qualitatif ensuite. De plus en plus de voix s'élèvent pour affirmer qu'il faut se garder de penser les effets induits du vieillissement de la population de façon trop mécanique, trop déterministe, trop liée à nos représentations actuelles de la vieillesse. Avoir soixante ans demain n'aura pas la même signification qu'hier. Les générations qui arriveront demain à l'âge de la retraite seront mieux logées, plus souvent propriétaires de leur logement, habiteront davantage en périphérie des agglomérations dans des maisons individuelles. Elles seront plus mobiles, et en particulier au volant de leur voiture, auront des pratiques différentes de loisirs, des racines souvent plus urbaines, etc. Autre exemple : si le vieillissement de la population française doit conduire, comme certains l'affirment, à une adaptation du «contrat» qui lie l'ensemble du corps social — adaptation d'autant plus forte que le phénomène sera marqué —, les modalités de cette adaptation ne sont pas arrêtées, leurs conséquences pas toujours clairement perçues. La seconde raison est que **le vieillissement de la population française ne se déclinera pas de façon identique sur l'ensemble du territoire**. Et si l'avenir n'est pas écrit à l'échelon national, il l'est encore moins à l'échelon local où les facteurs d'incertitudes y sont plus nombreux. Cette réflexion, davantage localisée sur le vieillissement et ses effets induits, l'Ile-de-France, première région

économique de France, se devait d'y contribuer. D'autant que les conséquences potentielles sont nombreuses et affecteront le fonctionnement de l'agglomération. Qu'il s'agisse des besoins de services et d'équipements sanitaires et sociaux, des modifications de comportements (usage du temps libre, consommation, modalités de déplacements...), des incidences sur le réseau de transport d'une population où la part des actifs diminue, des conséquences sur le marché du logement d'un nombre croissant de propriétaires parmi les nouvelles générations de retraités, du vieillissement de la population dans le parc locatif social, du développement du phénomène des doubles résidences...





Restituer la richesse considérable des réflexions existantes sur ce thème à l'échelon national, les soumettre à débat, identifier les points d'ombre et mieux cerner les enjeux qui en découlent pour l'Ile-de-France paraissait donc utile. Pour y parvenir, l'Iaurif a demandé à des spécialistes reconnus —médecins, épidémiologistes, sociologues, acteurs de l'aménagement, démographes, économistes, prospectivistes ... — d'exposer et de confronter leurs travaux et leurs réflexions au cours de cinq séminaires thématiques organisés entre fin 1997 et début 1998 :

1. Le phénomène du vieillissement en France et en Ile-de-France :  
Philippe Louchart ;
2. Vieillesse et santé :  
Ruth Ferry et Philippe Pépin ;
3. Personnes âgées et transports :  
Jean-Pierre Orfeuill ;
4. Vieillesse de la population et marché du logement :  
Jean-Claude Driant ;
5. Vieillesse et modes de vie :  
Ferrial Drosso.

Plus d'une trentaine de personnalités extérieures à l'Iaurif ont participé activement à ces cinq séminaires, certaines ponctuellement, et d'autres en continu pour nous aider à tisser un lien entre les différentes thématiques.

Leurs contributions, ainsi que celles préparées par l'Iaurif ou suscitées par les échanges qui eurent lieu durant ces cinq journées, forment l'ossature des Cahiers 121 et 122.

Ces articles — qui ne couvrent pas l'ensemble des implications du vieillissement de la population<sup>1</sup> et bien sûr n'engagent que leurs auteurs et non les institutions auxquelles ils appartiennent — sont donc organisés en cinq chapitres — un par séminaire — et introduits par leurs organisateurs : l'occasion pour eux à la fois de présenter les différents travaux et de souligner les points qui ont fait débat lors de ces journées.

Puissent ces Cahiers permettre à chacun de mieux comprendre les enjeux associés au « vieillissement » de la population et au débat de dépasser le cercle restreint de spécialistes dont il est issu. Ce thème nous concerne tous, à titre individuel et sur le plan collectif.

Et que toutes les personnes qui nous ont apporté leurs savoirs et leurs interrogations soient ici une nouvelle fois remerciées<sup>2</sup>.

Philippe Louchart  
Démographe



Illustr. : D.I.

(1) Parmi les implications du vieillissement qui n'ont pas fait l'objet de développement particulier, citons par exemple celles sur la gestion du personnel des entreprises ou sur l'équilibre du marché du travail auquel est consacré le numéro 300 de la revue *Économie et statistiques* : « *Projections de population active et participation au marché du travail* », Insee, 1996-10

(2) Y compris celles qui ne signent aucun article dans ces Cahiers, à savoir : Catherine Bonvalet (Ined), Anne-Marie Fribourg (Pca), Michel Herrou (École d'architecture Paris-Villemin), Marie-Eve Joël (Université Paris-Dauphine), Thérèse Spector (Drast/Cpvs) et Joël Yerpez (Inrets).

# Ageing of the population: facts and concerns

**K**nown facts. As demographers have long been forecasting, today it is widely known that France – like the other industrialised countries – will see its population age significantly in the near future. There will be an increase both in the number and in the relative burden of “elderly” persons for the entire French population.

The possible effects of this phenomenon is cause for much concern. They have given rise to a number of initiatives and warnings for several decades. Then why is there new interest in this problem? And why in Ile-de-France in particular? There are two main reasons for this.

First, **the future is not written in stone. A number of questions remain unanswered.**

For instance, the scope of ageing itself is at the heart of this debate. Let us first address this topic on a quantitative perspective. Some believe that the hypothesis of a longer life expectancy is too “optimistic”, particularly concerning women (whose behaviour is becoming increasingly similar to that of men). However, others maintain that it is overly “cautious”, considering future medical advances and current research in molecular biology and the possible effects on long life expectancy.

This debate is not impartial. In fact, with regard to its forecast of the number of persons 65 and over in France by the year 2020, Insee estimates made between 1979 and 1994 increased by 3.5 million.

Second, let us take a look at the qualitative perspective. It is increasingly being said that we must guard against exceedingly mechanical and deterministic perceptions regarding the effects of ageing; perceptions which often reflect our current outlook on old age.

In the future, being sixty will be quite different than in the past. When future generations retire they will enjoy better housing. A larger number will be home owners and live in private houses in the outskirts of

metropolises. They will have greater mobility – particularly at the driving wheel – different leisure activities and generally more urban roots, etc.

Other example: some believe that, as the French population ages, the “contract” that unites society as a whole will have to be adapted. The higher, more pronounced this phenomenon, the more adaptation needed. However, the terms and conditions of such an adaptation have not been defined, their effects are not always clearly understood.

The second reason is that **the ageing process in France will not be identical throughout the country.** If the future is not clear on a national scale, it is even less so on a local level, where there are greater factors of uncertainty.

As the country’s leading economic region, it was Ile-de-France’s duty to contribute to this reflection, which focuses primarily on the steady ageing of the population and its ensuing effects. Especially considering that the significant potential effects will affect the functioning of the agglomeration.

For example, such effects may involve: social / health facilities and service needs; changes in behaviours (use of free time, consumption, transportation, etc.); trends in the housing sector of an increasing number of property owners within the new generations of retired persons, ageing of the population in rental housing, development of two residences, etc.

It would therefore seem beneficial to take the considerable richness of today’s reflections on this topic to a national level, present them for debate, identify the ambiguous points and better define the ensuing challenges for Ile-de-France.

In this framework, the Iaurif asked renowned specialists – doctors, epidemiologists, sociologists, actors in urban development, demographers, economists, future on-lookers, etc. – to present and compare their studies and reflections during five theme seminars organised between late 1997 and early 1998:

1. Ageing in France and Ile-de-France: Philippe Louchart;
2. Ageing and Health: Ruth Ferry and Philippe Pépin;
3. Elderly Persons and Transports: Jean-Pierre Orfeuill;
4. Ageing of the population and the housing market: Jean-Claude Driant;
5. Ageing and Life Styles: Ferrial Drosso.

Over thirty people, outside the laurif, actively participated in these five seminars. Some contributed in particular areas, and others participated more consistently to help establishing the links between the various topics. These contributions, as well as those either prepared by the laurif or initiated through the exchanges which took place during this 5-day event, constitute the framework of "Les Cahiers" 121 and 122.

These articles – which do not cover all of the implications involved in the ageing of the population<sup>1</sup> and, of course represent only the ideas of their authors and not those of the institutions to which they belong – are divided into five chapters (one per seminar). Written by the seminar organisers, the introductions not only present the various studies, but also stress the major areas of discussion during this event.

May these "Cahiers" give you a greater insight to the challenges associated with "ageing," and to the debate for going beyond the confined circle of specialists from which it originated. This subject concerns all of us as individuals and as part of the social structure.

To everyone who contributed their expertise and concerns, once again please receive our sincere gratitude<sup>2</sup>.

(1) There are other implications of ageing which were not the object of particular development; for example, implications on the management of personnel in companies, or those on the balance of the work force, which is the focus of issue 300 of the magazine *Economie et statistiques* "Projections de population active et participation au marché du travail" (Projections of the working population and participation in the work force), Insee, 1996-10

(2) Including those whose names do not appear: Catherine Bonalet (Ined), Anne-Marie Fribourg (Pca), Michel Herrou (École d'architecture Paris-Villemin), Marie-Eve Joel (Université Paris-Dauphine), Thérèse Spector (Drast/Cpvs) and Joël Yerpez (Inrets).

# La relativité de l'âge

**L**e premier séminaire organisé par l'Iaurif, « Le phénomène du vieillissement en France et en Ile-de-France » poursuivait trois objectifs :

- 1. réfléchir sur le concept même de vieillissement d'une population :**  
Patrice Bourdelais,  
Andrée et Arié Mizrahi ;
- 2. aborder ses conséquences économiques, sociales et politiques à l'échelon national :**  
Didier Blanchet, Hugues de Jouvenel  
et Jean Peyrelevade ;
- 3. préciser et comprendre la dynamique des évolutions en cours en Ile-de-France, aussi bien à l'échelon de la région dans son ensemble qu'à l'échelon local :**  
Marianne Sagot et Philippe Louchart.

## « L'âge de la vieillesse »

Une enquête effectuée par l'INED<sup>1</sup> en 1996 montre que si la population française est « vieille », c'est aujourd'hui davantage dans l'imaginaire des jeunes lycéens que dans la réalité : 75 % des élèves de terminale « surestiment fortement la part des plus de 60 ans en la situant entre 26 et 30 % de la population totale au lieu de 19 % » alors même qu'ils ont « une bonne connaissance du processus de vieillissement de la population (71 %) et de ses causes (84 %) »<sup>2</sup>.

Alors, comment se fait-il que la structure par âge de la France soit aussi mal connue ? Est-ce uniquement une question de connaissances ? Un tel décalage n'est-il pas aussi le signe que le concept même de « vieillissement d'une population » et les représentations qui lui sont associées, voilent la réalité davantage qu'ils n'aident à la comprendre<sup>3</sup> ?

C'est la thèse défendue par **Patrice Bourdelais** pour qui « du fait des conditions de son émergence et de son utilisation, la notion de vieillissement de population propage et pérennise la vision négative de la vieillesse qui lui est consubstantielle » et pour qui « la principale difficulté des spécialistes chargés d'envisager l'avenir est d'échapper à la chape du prêt-à-penser démographique, parce qu'il fournit un cadre conceptuel, des catégories de mesure et d'analyse aujourd'hui obsolètes ».

Le sexagénaire ou le septuagénaire de 1998 ne ressemble en rien à son grand-père ou même à son père des années 60. Alors pourquoi ne pas mesurer le vieillissement d'une population en retenant un âge d'entrée dans la vieillesse variable dans le temps : celui auquel il reste en moyenne cinq ou dix ans à vivre. Or, cet âge s'accroît depuis plus d'un siècle, et fortement depuis le début des années soixante. Et ce qui frappe avec cette approche, c'est la conclusion à laquelle elle conduit, à savoir le non vieillissement de la population française depuis un siècle.

(1) Institut National d'Etudes Démographiques.

(2) Population et Sociétés, n°324, mai 1997.

(3) Ces mêmes élèves assimilent aussi l'âge de la retraite et l'âge de la vieillesse et « considèrent que l'on est « vieux » en moyenne à partir de 61 ans pour les femmes et de 62 ans pour les hommes ».

Sans nier la croissance de la proportion de retraités dans la population française, Patrice Bourdelais souligne donc la fragilité de la notion de vieillissement de la population, qui suppose une immuabilité de l'âge de la vieillesse dans le temps. Or, pour lui, la vieillesse se définit moins à partir de la durée écoulée depuis la naissance — l'âge — qu'à partir du temps qui reste à vivre - l'espérance de vie à un âge donné. Et définir la vieillesse davantage à partir du temps à venir que temps passé, c'est aussi pour Patrice Bourdelais le moyen de transformer un avenir-fatalité en un avenir-potentialité.

**Andrée Mizrahi** et **Arié Mizrahi** prolongent cette réflexion et passent en revue les différentes façons de définir un âge limite de la vieillesse. Car pour eux, comme toutes les catégories en sciences humaines, la classification en âges de la vie ne peut pas être immuable. Elle doit suivre et s'adapter aux évolutions des différents aspects économiques, sociaux, démographiques, idéologiques,... les limites entre adolescence et âge adulte et entre maturité et vieillesse ne peuvent qu'être fluctuantes et adaptées, d'une part à l'objet de l'étude, d'autre part à l'époque, au pays, voire au groupe socio-économique.

A partir de données issues des enquêtes décennales de santé de 1980 et 1991, ils montrent aussi que selon l'angle de vue adopté — démographique, socio-économique ou épidémiologique — l'âge limite de la vieillesse évolue dans le temps selon des directions qui peuvent être opposées, même sur une courte période.

Ces réflexions ne sont pas de simples ergoterics de spécialistes. Elles nous interrogent, par exemple, sur l'usage qui est fait de l'âge pour rationner l'accès aux soins dans certains pays. Elles nous mettent en garde aussi contre certaines utilisations, par trop mécaniques, des chiffres habituellement utilisés dès qu'il est question de vieillissement. Ce n'est pas parce que le nombre de personnes âgées de 85 ans ou plus pourrait être multiplié par quatre à l'horizon 2050, par exemple, qu'il faut en conclure que le nombre de personnes âgées « dépendantes » va, lui aussi, être multiplié par quatre. La réalité sera peut-être meilleure ... ou pire ; ce qui est sûr, c'est que ces chiffres ne permettent pas, en eux-mêmes, de conclure. Tout dépendra de l'état de santé de cette population et des moyens mis en oeuvre pour éventuellement compenser, ou prévenir, les incapacités à l'origine de certaines situations de dépendance.

L'écart croissant et de plus en plus considérable entre la courbe des 85 ans ou plus et celle des décès montre bien, à sa façon, la différence de perspectives qu'induit une vision du vieillissement fondée soit sur le temps passé, l'âge — les 85 ans ou plus —, soit sur le temps à venir, les dernières années de la vie — le nombre annuel de décès. Il témoigne aussi de l'enjeu que constituent les politiques de maintien à domicile, voire de prévention.

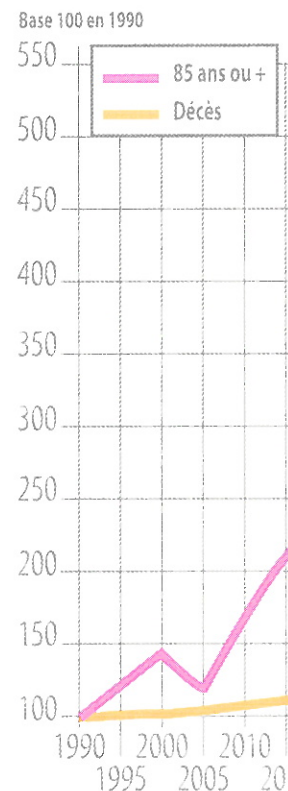
## L'âge de la retraite

Si l'âge de la vieillesse, « le grand âge » varie dans le temps et, à une même époque, entre personnes et entre groupes sociaux, en revanche, l'âge de la retraite est beaucoup plus homogène selon les individus. En matière de retraite, la « relativité de l'âge » ne joue pas ou peu, du moins en l'état actuel de la législation. On a l'âge de prendre sa retraite — 60 ans en général en France — ou on ne l'a pas. L'effet de bascule de la structure démographique d'un pays comme la France — lié à l'arrivée progressive à l'âge de la retraite, au début du siècle prochain, des générations du baby-boom — joue donc à plein et ne laisse pas d'inquiéter.

**Hugues de Jovenel**, **Didier Blanchet** et **Jean Peyrelevade** abordent, sous des angles différents, les conséquences induites par l'arrivée prochaine à l'âge de la retraite des générations du baby-boom sur le fonctionnement de la société française. Chaque contribution permet de comprendre un peu mieux la nature exacte du problème posé et les différents choix possibles, un préalable utile à un débat auquel notre société toute entière ne pourra échapper.

**Hugues de Jovenel**, après avoir rappelé les résultats des principaux travaux de simulation démographique pour la France, examine en détail « l'effet pur » du vieillissement démographique sur les dépenses de santé et de retraite, tel qu'il ressort de l'étude dirigée par Gérard Calot. Les conclusions sont sans ambiguïté : pour faire face au surcroît de dépenses liées au vieillissement en Europe à l'horizon 2045, il faudrait, dans le domaine des retraites par exemple, « soit augmenter de 49 % les taux de cotisation vieillesse, soit diminuer de 43 % le montant des pensions par rapport aux salaires, soit élever de 9,9 ans l'âge de cessation d'activité, soit encore faire croître de 75 % l'effectif de la population active sans élever l'âge de la retraite, par la seule progression des taux d'activité (essentiellement féminins) ou par recours à l'immigration. »

## France 1990-2050 Évolution du nombre de décès et de personnes âgées de 85 ans et plus



Source : Insee, scénario central, 1994



C'est à la fois beaucoup et peu : la hausse des taux de cotisation maladie et vieillesse nécessaires pour faire face à ces évolutions représentent des gains annuels de productivité de l'ordre de 0,5 % l'an. Un prélèvement sur l'économie très lourd si la croissance économique devait être du même ordre que celle enregistrée depuis 20 ans, mais relativement faible dans l'hypothèse d'une croissance comparable à celle des « Trente Glorieuses ». Et c'est bien là toute la difficulté.

Face à cette incertitude, la variable d'ajustement la plus efficace restera l'emploi selon Hugues de Jouvenel qui montre néanmoins combien la France est pauvre en emplois, et surtout en emplois réguliers — ceux qui servent d'assiette aux prélèvements aux taux en vigueur. Une situation qui résulte selon lui du fait que le travail est beaucoup plus lourdement taxé en France que par exemple, dans les pays scandinaves. En France, le prélèvement obligatoire est essentiellement composé de cotisations sociales assises sur les salaires — et pénalisent en conséquence l'emploi — alors qu'il est surtout composé dans les pays scandinaves d'impôts qui pèsent sur l'ensemble des revenus — et où, en conséquence, il joue un plus grand rôle redistributif.

Pour **Didier Blanchet**, il est clair qu'on ne pourra pas maintenir à la fois l'âge de la retraite, le mode de financement, le niveau des prélèvements obligatoires et le pouvoir d'achat relatif des retraités. Mais il importe, selon lui, de ne pas envisager les conséquences du vieillissement de la population de façon trop déterministe, car de nombreux choix restent possibles.

Il souligne aussi que l'ampleur du taux de chômage en fin de carrière et des dispositifs de pré-retraite témoignent d'une pratique des employeurs qui pose question dès lors qu'il serait envisagé une remontée de l'âge de la retraite pour endiguer la dérive des prélèvements obligatoires.

Il rejoint en cela les analyses d'Anne-Marie Guillemard<sup>(4)</sup>, pour qui, en l'état actuel du fonctionnement du marché du travail, toute hausse de l'âge de la retraite risquerait surtout d'accroître la période intermédiaire qui se développe entre la sortie définitive d'activité et l'entrée dans le système de retraite. Une « solution » qui risquerait donc de développer plus encore les dispositifs destinés à fournir un statut « d'attente » à ces personnes, trop âgées pour « prétendre » à un emploi mais « trop jeunes » pour prendre leur retraite.

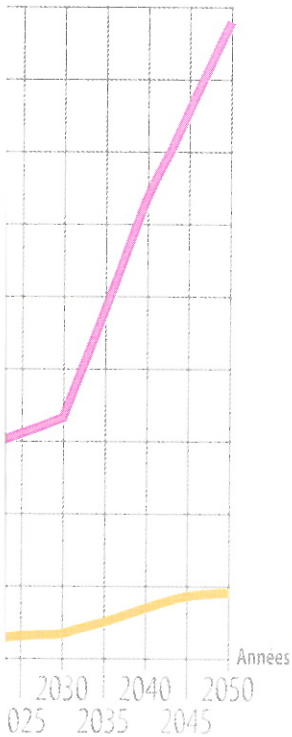
(4) Anne-Marie GUILLEMARD : « Sorties précoces d'activité », *Projet*, n°249, Printemps 1997.

**Jean Peyrelevalde** part quant à lui du constat qu'au cours des vingt-cinq dernières années, le transfert de revenus entre actifs et retraités s'est profondément modifié. Le revenu de ces derniers a progressé deux fois et demie plus vite que celui des actifs, avec un impact évidemment très important sur le niveau des prélèvements. Poursuivre sur ces tendances serait, selon lui, faire payer aux jeunes générations une note exagérée, et compromettre croissance et développement en écrasant la sphère productive sous le poids des prélèvements. Le problème du vieillissement est donc avant tout celui du partage du revenu national entre actifs et inactifs. Ce qu'il montre après avoir rigoureusement documenté l'évolution passée et la situation actuelle, en élaborant plusieurs scénarios futurs du partage des revenus.

De l'issue des débats qui vont agiter la société française dans les années à venir dépendra en grande partie l'évolution future du revenu des retraités — et bien sûr des actifs. On peut néanmoins avancer que le revenu des personnes « âgées » devrait continuer à être supérieur à celui des actifs pendant encore quelques temps pour au moins quatre raisons. De plus en plus de personnes bénéficieront de carrières complètes et donc de droits à la retraite complets. De plus en plus de ménages vivront avec deux retraites, suite au développement de l'activité féminine et au recul de la mortalité. De plus en plus de femmes auront acquis des droits directs et ne dépendront plus de la seule pension de réversion de leur conjoint après son décès. Enfin, les salaires moyens observés par génération montrent que le revenu des actifs au moment de la retraite continuera à croître au cours des prochaines années.

Néanmoins, si le revenu moyen des ménages de retraités devrait continuer à progresser pendant plusieurs années, un écart croissant est à prévoir entre les revenus perçus juste avant et juste après la retraite. Et les conséquences de cette chute croissante du niveau de vie relatif des retraités sur leur comportement font partie des grandes interrogations pour demain.

Il faut aussi insister sur la croissance probable du nombre de « vieux pauvres » à côté de « vieux aisés », en raison de la baisse prévisible du taux de rendement des retraites mais aussi de l'instabilité des unions et de la précarité économique d'une partie croissante de la population active. La pauvreté des familles monoparentales pourrait par exemple se prolonger après le départ des enfants. Et plus généralement, vieillir continuera à être plus facile quand il y a une famille.



## Globalement, un avenir incertain, même pour les démographes ?

Par rapport aux économistes, qui font des prévisions à trois mois, six mois, voire un an, et souvent se trompent, les démographes bénéficient, en règle générale, d'une meilleure image, eux qui sont capables de chiffrer ce que sera la population de la France et sa structure par âge à l'horizon d'une trentaine d'années, voire davantage. Et s'il est des chiffres qui semblent le moins souffrir la contestation, ce sont bien ceux du nombre futur de personnes « âgées ». Car si les démographes n'ont jamais réussi à anticiper les retournements de la fécondité, en revanche, lorsque les enfants sont nés, la « mécanique démographique » est bien mieux « rôdée », entend-on souvent, et le résultat des calculs bien plus assuré.

**Mariette Sagot** montre pourtant que la prudence reste de mise, surtout à un horizon éloigné. Elle rappelle qu'entre les simulations démographiques réalisées pour la France par l'Insee en 1979 et celles de 1994, c'est-à-dire en l'espace de quinze ans, la population des 65 ans ou plus à l'horizon 2020 est passée de 9,6 à 13,1 millions de personnes : un « bond » de 3,5 millions d'unités ! De quoi modifier radicalement les données du problème de l'équilibre des régimes de retraite. Pour l'Ile-de-France, elle propose donc plusieurs scénarios et teste la sensibilité des résultats aux hypothèses faites. Dans le scénario central, l'augmentation du nombre des 60 ans ou plus s'avère moins marquée en Ile-de-France qu'ailleurs en France (du fait d'importantes migrations au moment de la retraite). Et elle résulte surtout, en Ile-de-France, du vieillissement des générations du baby-boom (57 %) et un peu moins de la progression de l'espérance de vie (43 %), soit une situation différente de celle observée en France où les proportions et l'ordre des facteurs sont inversés.

Mariette Sagot indique enfin les évolutions à attendre en Ile-de-France si l'on retient, comme le préconise Patrice Bourdelais, un âge de la vieillesse évolutif au cours du temps

## Localement, vers un marquage social accru des territoires ?

Cette incertitude quant à l'ampleur réelle du vieillissement se retrouve bien entendu à tous les échelons géographiques, avec la particularité, comme le montre **Philippe Louchart**, qu'à l'échelon local, le vieillissement de la population apparaît comme un processus ...

- ... **déjà connu** par beaucoup de communes rurales, mais aussi urbaines. En 1975, par exemple, 23,3 % des Parisiens avaient dépassé la soixantaine, une proportion que l'on ne devrait pas observer en France avant 2010 (voire avant 2030 si la fécondité remontait jusqu'à atteindre 2,1 enfants par femme).
- ... **fortement lié à l'histoire de l'urbanisation de la commune**. Les populations communales sont d'autant plus jeunes, la proportion de 60 ans ou plus d'autant plus faible, que l'urbanisation de la commune est récente, que son parc de logements est récent.
- ... **dont l'ampleur dépend beaucoup de la nature du parc de logements** forte potentiellement dans les communes qui ne comptent que des maisons individuelles occupées par le propriétaire, plus faible lorsque le parc de logements est plus diversifié, en taille comme en statut d'occupation.
- ... **et réversible partiellement** puisqu'il porte en lui ses propres limites du fait du renouvellement de la population qu'induisent les décès, et ceci pour autant que la commune reste attractive.

Il souligne aussi qu'au niveau local, une proportion **durablement élevée de 60 ans ou plus est le signe...**

- ... soit d'une **attractivité faible sur les plus jeunes**, situation fréquente dans les zones rurales les plus éloignées des centres urbains, mais en régression constante en Ile-de-France
- ... soit d'une **attractivité forte et de prix immobiliers élevés** qui agissent comme des filtres puissants à l'entrée dans le logement et donc dans la commune, favorisant l'arrivée de familles « âgées et aisées » avec de grands enfants au détriment de ménages « jeunes et moins solvables » avec des enfants en bas âge. Des caractéristiques qui limitent d'autant la capacité des populations communales à « rajeunir » par le jeu des arrivées et des départs.

A l'échelon local, enfin, le vieillissement de la population pourrait jouer dans le sens d'un renforcement de la ségrégation socio-spatiale en Ile-de-France, un point évoqué au cours de ce premier séminaire et qui fut repris lors du quatrième consacré aux effets attendus sur le marché du logement<sup>5</sup>.

(5) cf volume 2 « Cahier 121-122 » déc. 98

# The relativity of age

**T**he first seminar organised by the Iaurif, entitled "The steady ageing in France and Ile-de-France" has three objectives:

1. **to consider the concept of the ageing of a population:**  
**Patrice Bourdelais and Andrée and Arié Mizrahi;**
2. **to address its economic, social and political impacts on a national scale:**  
**Didier Blanchet, Hugues de Jovenel and Jean Peyrelevade;**
3. **to identify and understand the current changing dynamics throughout the region of Ile-de-France as well as on a local level:**  
**Mariette Sagot and Philippe Louchart.**

## «Old age»

According to a 1996 survey conducted by the INED<sup>1</sup>, the notion that the current population in France is "old" is more a product of the imagination of secondary school students than an actual fact: 75% of final year secondary school students "overestimate the proportion of persons over 60 between 26 and 30% of the total population, instead of 19%", even though they are "well aware of the ageing process that a population undergoes (71%) as well as its causes (84%)."<sup>2</sup>

Considering this, why are people so misinformed about the breakdown of age groups in France? Is it only a question of awareness? Couldn't such a discrepancy be an indication that the very concept of "ageing of the population" and all that it entails further conceals the reality rather than helps to understand it? Such an assertion is upheld by **Patrice Bourdelais**, who maintains that, "considering its emergence and use, the notion of ageing spreads and perpetuates the negative perception of old age with which it is associated. He adds "...the main difficulty faced by experts in charge of forecasting the future is to escape the demographic ready-to-think burden; its current theoretical framework and categories for measurement and analyses are obsolete."

Today's 60- and 70-year-olds cannot be compared to their grandfathers of even their fathers from the 1960s. Then why not measure the ageing of a population by a designated "age of entry" into old age that varies in time – an individual who has an average of five to ten years to live. Yet, this age has been increasing for over a century, and has climbed sharply since the early 60s. What is striking about this approach is its results: for a century, the French population has not been ageing.

(1) National Institute of Demographic Studies.

(2) *Population et Sociétés*, n°324, mai 1997.

(3) These students also equated retirement age with old age and "consider 'old age' on average to begin at 61 for women and 62 for men."



Without disputing the increasing proportion of retired persons in France, Patrice Bourdelais emphasises the fragility of the notion of ageing, which presupposes the immutability of the age of the elderly in time. He believes old age is defined less by the number of years lived since birth – age – than by the amount of time left to live – life expectancy at a given age. According to Mr. Bourdelais, defining old age based more on the future than on the past, is also a way, of transforming a future fatality to a future potential.

**Andrée Mizrahi** and **Arié Mizrahi** expand on this concept and outline the different ways of defining an “age of entry” into old age. They contend that, like all the branches of social sciences, the classification of life by ages cannot be immutable. It must follow and adapt to the changes in various economic, social, demographic, ideological and other aspects. The boundaries between adolescence and adulthood, and between middle-age and old age inevitably fluctuate and must be adapted not only for the purposes of the study, but to the period, country and even the socio-economic group.

According to data obtained from 10-year health surveys carried out in 1980 and 1991, they also show that, depending on the point of view - demographic, socio-economic or epidemiological – the age limit of the elderly changes in time; it can increase or decrease, even over a short period.

These concepts are not just petty quibblings put forth by experts. They question, for instance, the use of age for rationing access to medical treatment in certain countries. They also caution us against certain highly mechanical uses of figures generally used with regard to ageing. For example, the fact that the proportion of persons 85 or over may quadruple by 2050, does not mean that the number of “dependent” elderly persons will do the same. In reality, the future could be better... or worse. What is certain is that conclusions should not be drawn from these figures alone. It will depend on their health conditions and the measures taken to compensate for, or anticipate, the disabilities that cause certain forms of dependency.

There is an ever-widening gap between the 85 and over mark and that of death. In its own way, it clearly shows the different perspectives induced by those who measure old age either based on the years past, age – persons 85 and over –, or on the years to come, the final years of life – the annual number of deaths. It also illustrates the challenge posed by home care and even prevention policies.

## Retirement age

The period of old age – “the venerable age” – varies in time, and between people and social groups in a specific era. Retirement age, conversely, is much more consistent according to individuals. As regards retirement, the “relativity of age” has little or no relevance, at least according to current legislation. It is simply a question of whether or not one has reached the age of retirement – generally 60 in France. The impact of a changing demographic structure in a country like France – due to the gradual retirement of the baby boom generation in the beginning of the 21st century – is therefore entirely applicable.

**Hugues de Jovenel**, **Didier Blanchet** and **Jean Peyrelevade** each offer their own viewpoints in addressing the effects that the upcoming retirement of the baby boom generations will have on French society. Each perspective enables us to better understand the exact nature of the problem and presents various possible alternatives; a valuable preamble to a debate which will ultimately challenge our entire society.

After examining the findings of the principal population forecasts for France, **Hugues de Jovenel** outlines the “direct effects” of ageing on health costs and retirement based on the study headed by Gérard Calot. The conclusions are clear: in order to effectively meet the rising costs associated with ageing in Europe by 2045 (with regard to retirement, for instance), “retirement contribution rates would have to be increased by 49%; or pensions would have to be cut by 43% in relation to salaries; or the retirement age would have to be pushed back by 9.9 years; or the working population would have to be increased by 75%, without raising the retirement age, but instead of increasing activity levels (mainly for women) or encouraging new immigration.”

This is considerable, but also insufficient: the increase needed in health and retirement contribution rates to offset the effects of ageing would amount to a 0.5% decline in production per year. This would have a very strong effect on the economy if it continues to grow at the same rate registered over the last twenty years. However, the effect would be relatively small in the hypothetical case of economic growth comparable to the “Thirty Glorious Years.” This is precisely where the difficulty lies.

According to Hugues de Jovenel, employment will continue to be the most effective variable in economic

adjustment in face of such uncertainty. Nonetheless, he exposes the job shortage in France – especially regular jobs – which serve as the tax base for the current contribution rates. He attributes this situation to the fact that France has a much higher tax burden than, for instance, Scandinavian countries. Compulsory withholding tax in France is essentially comprised of social contributions based on salaries that, consequently, penalises employment. In the Scandinavian countries, however, it is principally made up of taxes based on overall revenue. In this way, it plays a more general role of redistribution.

From **Didier Blanchet's** viewpoint, it will certainly not be possible to simultaneously maintain the retirement age, the method of financing, the rate of compulsory tax withholdings and the relative purchasing power of retired persons. What is important, he maintains, is not to make an overly deterministic forecast on the effects of ageing, for there are many alternatives.

Furthermore, he adds, the high unemployment rate for persons nearing the end of their career and early retirement packages, demonstrate employer practices which shall be called into question when the retirement age is pushed back to meet the compulsory withholding tax.

He also includes analyses made by Anne-Marie Guillemard<sup>4</sup>. Considering today's labour force, she believes that a deferral of the retirement age would particularly add to the number of persons in the intermediary period – the interval between the definitive suspension of activity and entry into the retirement system. This "solution" could further encourage the development of a "pending" status for people who are too old to "apply" for a job but "too young" to retire.

**Jean Peyrelevade** addresses the issue of revenues. Over the past twenty-five years, the transfer of revenues between the working population and retired persons has undergone considerable changes. The revenue of the latter has increased by 2.5 times faster than that of the working population. Consequently, this has had a very strong impact on tax withholdings. Mr. Peyrelevade maintains that the problem of ageing lies, above all, in the equal distribution of national revenue between the working and non-working population. This is shown following his rigorous documentation of past developments and the current situation, through several future scenarios of revenue distribution.

(4) Other studies by Anne-Marie GUILLEMARD: «Sorties précoces d'activité», *Projet*, n°249, Printemps 1997.

The future revenue of retired persons - and of course that of the working population - will largely depend on the outcome of the debates that will challenge the French society in the coming years. Nonetheless, it is safe to say that the revenue of "elderly" persons should continue for some time to be higher than that of the working population for at least four reasons. As an increasing number of people will have full careers, they will consequently have full pension rights. Due to the rising number of women in the labour force and a declining mortality rate, a growing number of households will live on two pensions. More women will have earned direct pensions and will no longer depend simply on the reversion pensions of their spouse following his death. The average salary observed per generation shows that the revenue of the working population upon retirement will continue to climb over the coming years.

Nonetheless, if the average revenue of retired households continues to increase for a number of years, there will be a growing divergence between revenue earned just before and just after retirement. The effects on the behaviour of retired persons, due to this increasing drop in their relative standard of living, are among the major areas of concern for the future.

It is also important to point out the probable increase in the number of "poor elderly persons" alongside "well-to-do elderly persons." This would result not only from the expected decline in retirement pensions, but also from unsteady unions and the unstable financial situation of a growing proportion of the working population. For instance, the situation of poor single-parent families could remain unchanged even after the children move out. In general, family will always make ageing easier to deal with.

## Overall, does the future look uncertain, even for demographers?

Unlike economists, whose 3-month, 6-month or even annual forecasts are often inaccurate, demographers generally enjoy a better image. In fact, they can forecast what the population in France will be in 30 years or more (including the breakdown by age group). Among the least disputed forecasts are those regarding the number of "elderly" persons in the future. Although demographers have never been able to forecast reversals in the birth rate, it is often said that the "demographic mechanism" seems to "run much more smoothly," and forecasts are more accurate, after children are born.

Yet, **Mariette Sagot** shows that we must exercise caution, especially when making long-term forecasts. She recalls that between the demographic forecasts for France established by the Insee in 1979, and those made in 1994 – in other words, a span of 15 years – the proportion of the 65 and over age group by 2020 increased from 9.6 to 13.1 million persons. The figures thus “jumped” by 3.5 million people! This alone warrants radical changes in data for the balancing of pension schemes. She presents several scenarios for Ile-de-France, and tests the likelihood of the hypotheses put forward. The principal scenario shows that the proportion of persons 60 and over increases less in Ile-de-France than elsewhere in the country (due to significant migration of the population upon retirement). This is attributed more to the ageing of the baby boom generations in Ile-de-France (57%), than to a longer life expectancy (43%). This makes for a different scenario than that observed in France, where the proportions and the order of factors are quite the opposite.

Finally, Mrs. Sagot indicates expected developments in Ile-de-France if the “age of entry” into old age is adapted over time (as advocated by Patrice Bourdelais).

## Are certain areas being socially “branded” on a local level?

The uncertainty regarding the real scope of ageing is, of course, felt on all geographic scales. As shown by **Philippe Louchart**, ageing on a local level in particular seems like a process which ...

- ... **already exists** in many rural and urban communities. In 1975, for example, 23.3% of Parisians were already over 60. On a national scale, this proportion should not be reached before 2010 (nor even before 2030 if the birth rate increased to 2.1 children per woman).
- ... **is strongly associated with the community's urban development history**. The more recent a community's urban or housing development, the younger the population and the lower the proportion of persons 60 and over.
- ... **depends largely on the nature of housing** (high potential in communities with exclusively private houses occupied by the owners; lower potential when housing is more diverse, both in size and occupancy rates).
- ... **and is partially reversible**. It has its limits due to the rejuvenation of the population following the

decease of the elderly, as long as the community remains attractive.

He also stresses that **a long-term proportion of persons 60 and over is the sign that...**

- ... either **the community does not really attract a younger population** (common in rural areas which are more distant from urban centres, however this is constantly on the decline in Ile-de-France)
- ... or **the community is very attractive with high property values**. These factors act as strong filters for new arrivals into a housing development, and thus the community. They favour “older and well-to-do” families with grown children, over “young and less financially sound” families with young children. Such factors hinder the “rejuvenation” of these communities by playing their cards right with new arrivals and departures.

Ageing on a local level could lead to the reinforcement of socio-spatial segregation in Ile-de-France. This point was addressed during this initial seminar, and was taken up again during the fourth one which focused on the expected effects on the housing market.

(5) see infra

# Thinking out the question of the ageing of the population during the years to come

**Patrice Bourdelais**

Head of studies

E.H.E.S.S.<sup>1</sup>

**T**he number of persons over sixty and over eighty, has been increasing now for several decades. There is every reason to believe that this trend will continue and will have repercussions on economic, social and cultural life. In order to extricate oneself from the pessimistic and alarmist structure of French demography which basically goes back over a century in this domain, Patrice Bourdelais explores some of the trails. He uses a choice of indicators which play a decisive part in providing the answers to the questions of facilities and social policy.

It is impossible to study the history of the twentieth century in France, or think to the future, without coming up against the question of demographic ageing, the observable change in the population structure and social and political structure. Like any phenomenon, the ageing of the population only became perceptible from the moment specialists provided the tools for thinking it out, in the case in point a reflection in terms of structure by age integrated into a diachronic vision. That was how the notion of ageing came into being, between the latter years of the nineteenth century and the end of the 1920s, in an intellectual and political context in which there was constant fear for the future of the French population<sup>2</sup>. The ageing of the population even became the favourite propaganda issue of the leagues in favour of a rising birth rate. The effects of the descriptions inferred by those particular conditions of emergence and use are still perceptible nowadays (particularly the static, negative view of old age). The main difficulty for specialists with the task of envisaging the future is to avoid the millstone of ready-made demographic ideas, because he provides a conceptual framework, categories of measurement and analysis that are today obsolete.

(1) École des hautes études en sciences sociales

(2) See Patrick Bourdelais, «*L'âge de la vieillesse, histoire du vieillissement de la population*», Paris, Odile Jacob, 1993, paperback edition 1997.

Changes have come about on a considerable scale in recent decades where 'the age of being old' is concerned; so much so that the diachronic use of the notion of the ageing of the population, based on an immutable threshold age for entering the 'elderly' or 'old people' category, is no longer clearly relevant.

## A shift in the age of old age

Demographers and certain epidemiologists have often been criticised for taking the easy way out by considering that changes in mortality are an indicator of that of state of health. The objection is justified, and many examples consolidate it on the scale of micro-observation. Recent medical techniques may add a few extra years to life without a person's health being improved'. Yet, on a broader chronological or social scale, the correlations become quite clear: in the various countries of the world, mortality at 50 and the general state of health at that age are arranged in a similar fashion. In France, since the beginning of the twentieth century, the differences between the mortality of the different social classes and their state of health seem to go hand in hand. Furthermore, there also seems to be a strong correlation between invalidity and mortality.

In a first approach, it therefore seems to me that we are justified in observing the evolution of mortality in order to appreciate that of health.

(3) Here we come up against the delicate problem of how to define 'health'. If we wish to take into account the constant change in the biological thresholds of the normal and the pathological (diabetes, cholesterol...), I believe it is important to consider health as it is experienced by those concerned.

Since the beginning of this century, mortality has regressed to such an extent that the historian has some difficulty in enabling people to grasp the sheer scale. Life expectancy at birth has increased tremendously, from 43.4 years in 1900 to 74 in 1996 for men, and 47 to 82 for women—+30.6 years for men, +35 years for women, i.e. the equivalent of total life expectancy at the end of the eighteenth century. Every age has been concerned, but those aged sixty and over have taken a large share in the overall result: for women, the death rate at the age of 60 has decreased by 79% since 1905 and for men it has decreased by 56%. Although the discrepancy between the sexes is high, the decrease is nevertheless considerable; there has even been an acceleration since the end of the 1960s: 26% of the overall decrease in quotients for women at 60, 33% at 75, and 45% of the decrease for men at 60, 42% at 75.

As a result, the sexagenarian's place in the generation groups has changed completely. At the beginning of the century, the 60-year-old was an old man whose parents were usually long since deceased. Nowadays, the sexagenarian plays a central, sometimes pivotal, role in the generation groups. More and more frequently, his parents are still alive, his children have given him his first grandchildren. He has to look after the former, who require a great deal of care and attention, help the latter by looking after his grandchildren or by helping out in the case of unemployment.

It must be added that, of those born in the 1830s, one woman in four celebrated her 70th birthday round about the year 1900; that nowadays septuagenarian women represent 69% of the generations born during the 1920s;

for women born in 1950, estimations are as high as 85%. In the twentieth century, it has gradually become commonplace to reach the age of 70.

The sexagenarian or septuagenarian in 1998 is nothing like his grandfather, or even his father in the 1960s. We may wonder whether it is still apt to string together series of figures or percentages for those who reached the age of 60 or 70 fifty or twenty-five years ago. **These people are in much better health, their place in the generation groups has greatly improved, as have their social and family status, and they are much more comfortably off. Is it therefore useful to keep track of those age groups?** Does it not infer the hypothesis of a diachronic homogeneity that is contrary to observations? What should be made of it?

## On the choice of indicators

The importance of the choice of indicators no longer needs to be proved. Yet in the field we are dealing with here, and using two examples, it is interesting to illustrate the extent of the discrepancy that exists between the various diagnoses of recent evolutions. The first example is to do with the ageing of the French population. The usual chronological view of the series of proportions for 'persons aged 60 and over' inevitably leads to the acknowledgement of a long-standing and considerable increase which should reach 30% by about the year 2040: (for women) 7 to 8% just before the French Revolution, 10% in about 1860, 12% just before the First World War, 14% in 1946, over 21% in the 1960s and 70s. Despite the accumulation of indexes considerable light on

changes in the age of old age, the legitimacy of such series, which we regard as misleading, or even dangerous, because of their economic and political uses, has hardly been called into question. Until recent years, the statistics for the 'old people' category were published in traditional fashion. How can such false evidence be smashed?

Endeavouring to accumulate the measures or elements pleading in favour of taking into account the change in the age of old age, was it not advisable to take that idea to its ultimate consequence, that is to say the notion of a variable age, sliding in time, for entering old age. This threshold was set using recent epidemiological surveys in order to characterise the population so far experiencing no disablement. The next step was to find an identical mortality quotient in the mortality tables for past decades, read the corresponding age and balance it against the age with a probable ten years left to live<sup>4</sup>. After a period of stagnation, up to the beginning of the twentieth century for women and up to the interwar period for men, the years following the Second World War saw the beginning of a period of constant progress, which was particularly clear from the late 1960s onwards.

Let us carry this hypothesis through. Why not consider that these different ages indeed form the threshold to old age from which it is possible to recalculate the ageing of the population? The new curve we obtain is very different from the usual one! We are struck by the non-ageing of the population rather than by its acceleration, as if the proportion of 'old people' in the French population had remained approximately stable for more than a

century, fluctuating around 10% (with variations related to losses, then to age groups depleted by deaths during the Great War). Obviously, it is not a question of maintaining that the proportion of persons of 65 or retired persons has not increased, but of **underlining the fragility of the notion of ageing of the population, which supposes that the age of old age remains unchanged over the years.**

The second example enables us to move down to the scale of a large city and its suburbs: that of Lyons. Using data provided by Agnès Quivet-Catherin, it was possible to calculate the median age of admission to eight institutions in Lyons<sup>5</sup>. There was an increase of 8 years for men (from 72 to 80) and 5 years for women (79 to 84) between 1966 and 1986. There are many factors to explain this, including better state of health, changes in family attitudes and the policy of home help to enable old people to remain in their own homes. It is nevertheless surprising to note that these two curves fit between those for the age with a further life expectancy of five to ten years, even though a fourth point, corresponding to admissions in 1996, would be precious as a confirmation of the diagnosis. Be that as it may, the rise in the age of admission leads us to think about the choice of an age criterion to define the population of reference that is the subject of our reasoning, for example for programming the building of new institutions. One of the traditional categories is the population aged '75 and over', which is strongly on the increase but whose health is clearly improving, as we have seen. After much consideration, we propose the choice of the population that is over

the threshold of '10 years' life expectancy' and it would even be possible to reduce the estimation to 6 or 7 years, according to the sex considered (but in this case there would have to be more surveys and studies, as situations may vary from one region to another).

The change of indicator has led to a contrary evolution in the general facilities rate in the Lyons region since 1966. Taking the number of old people aged 75 or over shows up a decrease in the rate of provision of facilities, while the choice of the number of persons with at least ten years left to live shows up an improvement in the rate of provision of facilities. However, this more 'optimistic' conclusion—which is also more realistic because the definition of the population is more relevant—does not mean that the rate of provision of facilities has reached a satisfactory level for it all depends on its appropriateness to needs in 1966.

It seems to me that this exercise has a very concrete advantage: that of showing up the importance of reflection in the choice of indicator, for the diagnosis where progression is concerned is simply reversed when we pass from one to the other. Over and above this demonstration, which is indeed impressive, may we now put forward a number of positions that are likely to improve the forecast?

(4) For further details of this calculation, see Patrice Bourdelais, «Un seul évolutif d'âge de la vieillesse: approches comparées France-Suède», *Annales de la démographie historique*, 1996, page 93.

(5) Agnès Quivet-Catherin, «Viellissement et destination de la population âgée en institution» (1962-1992). Etude longitudinale sur les entrants en 1966, 1976, 1986, dans huit établissements du Rhône, doctoral thesis.

## Deconstructing and reconstructing in order to make a forecast

Deconstruction of the notion of ageing of the population and the proposal of a sliding age for entering old age only enables us to attempt to distance ready-made ideas where demography is concerned, which are very difficult to escape. But we must now go further. Our earlier reflections were general and as such they did not take account of social dynamics. But several studies show that the gains recorded where mortality is concerned were unequally distributed over the social categories, that the social gradient of mortality corresponds to a scale of relative ageing levels.

Progress as a whole has not led to the elimination of social disparities where death is concerned. In the early 20th century, the French General Statistical Services attempted to measure mortality profession by profession: in the 55-59 age group, that of the workers was 80% higher than that of managers. Indeed, the mortality rate of 50-54 year-old workers was similar to that of managers aged 60-64. The results of the studies carried out during the periods 1955-59 and 1975-90 indicate the persistence of the phenomenon. While there has been a fall in the mortality rate for all social categories, the differences between the social categories are on the increase: during the period 1980-89, the life expectancy at 35 for the least fortunate (unskilled workers) was 9 years less than that of the most fortunate (literary and scientific professions and engineers). The difference was 7.8 years between 1960 and 1969. Although there are fewer skilled workers now than there used to be, it nevertheless appears that there has been an increase in inequality where life expectancy is concerned, while there has been general progress<sup>6</sup>. The middle and

upper categories were the first to benefit from the economic and medical improvements of the post-War period.

The great difference in mortality between the different social categories merely shows up the great difference in their states of health, at the ages of both 35 and 60. One of the few studies of senescence based on socio-professional categories confirms the mortality statistics and takes them further. From a series of indicators intended to measure biological age, it was observed that a worker aged 35 was biologically 4.5 years older than an executive of the same civil age. Survivors from the working class—fewer than from the other social categories—are also less healthy at every age than the survivors from other categories. A recent CREDES study confirms those differences<sup>7</sup>. Relative ageing, put forward as a synthetic indicator of life expectancy and disablement, enables us to estimate that, among the survivors, persons who left school early, compared to those who went on to study at university, age prematurely by more than three years. The difference is over five years when we compare the active executive with the unqualified, unemployed manual worker. The difference observed between the declarations of those concerned and the results of medical examinations shows different norms in the assessment of state of health: if the working classes overestimate the state of their health compared to the results of medical examination, the opposite is true among the more fortunate social categories, who expect more from medical progress and science, possibly because they have a less resigned attitude to the traditional course of life.

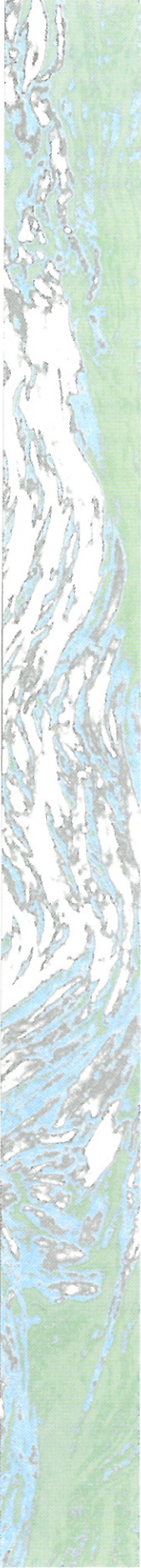
These observations lead us to believe that the fact that so many young people have become socially marginal in the past ten years will necessarily have an effect on their chances of living to the age of 70, the level of their death rate, and their state of health. The fact that this marginalisation is uncon-

trolled means that there will undoubtedly be less progress than one might expect from the evolution that was observed up to the 1980s. It would be all the more dangerous today to expect the earlier tendency to persist.

Furthermore, the improvement in the state of health of elderly people is very different at different ages. At the age of 60, gains are now feeble because of the high level that has already been reached, but what of those aged 80? Will there be further progress, as observed over the past twenty years, in mobility, for example? Will it one day be similar to that now observed in sixty years-old? The answer to that question is important for those now giving thought to facilities in the Paris region: for example, will not the return to the city centres affect persons of an increasingly higher calendar age? As yet, we do not possess all the elements that are needed to provide an answer. Indeed, there are two important and conflicting theories: a) life is limited biologically; it is simply that more of us are reaching that limit in a better state; b) life is like an elastic band, which can be stretched, thus postponing each of the different ages and also its end. In the latter case, disablement would not necessarily be restricted, but dependency would be transferred to older age groups. **Observations made in France on the years 1981-1991 show that life expectancy without disablement increased during that period more than overall life expectancy**, which means that disabilities regressed while life expectancy increased. At least for the decade in question, this empirically refutes the theory of a 'pandemic of disabilities' which, influenced by pessimistic talk of the ageing of the population,

(6) Guy Desplanches, «*l'inégalité sociale devant la mort*», *Economie et statistiques*, 162, 1984, pp. 29-50; and *Données sociales*, 1993.

(7) Andrée and Arié Mizrahi, «*État de santé, vieillissement relatif et variables socio-démographiques*», CREDES, Paris, 1994.



maintained that the increase in the number of old people and the lengthening of life would go hand in hand with an inevitable 'pandemic of disabilities'<sup>8</sup>. On the contrary, the most optimistic among us point out that the generations which reached the age of 80 during the 1980s had survived the Great War and Spanish influenza and that the following generations should progress age-wise in much better conditions, laying stress on the memory of organisms, living conditions during early childhood beyond those of adulthood and we have seen how important these are.

### **Making the future a potentiality rather than an inevitability**

If, because of the conditions of its emergence and use, the notion of the ageing of the population propagates and perpetuates the negative view of old age that is consubstantial with it, we cannot, however, adopt a smugly optimistic attitude. Granted, progress made in recent decades has changed the age at which we reach old age, but, as we have mentioned, recent social changes (marginalisation) may act as a hindrance to progress by reducing life expectancy and increasing disabilities. But giving thought to the future also means working on population prospects. It would probably be useful to invert the usual calculations, to remember, for example, that if we wish to maintain the percentage of 'elderly' people of 75 years and over at the 1985 level, the threshold age must be 77 in 2005 and 82 in 2040. It is a question of making the future a potentiality rather than an inevitability, by indicating the objective to be attained through social and public health policies, but also through the creation of facilities enabling older

people to remain more easily autonomous, to get around and live life to the full. In this article I have laid particular emphasis on the stakes represented by those in the 75-80 age group, in which there is greater risk of handicaps and disabilities. Sexagenarians and septuagenarians now enjoy continuing good health and despite earlier retirement, play an important part in family life: they must not be forgotten in housing and transport policies and in socio-cultural activities. The profound changes that have taken place in the age at which we reach old age will undoubtedly lead to new aspirations and practices as well as needs hitherto unsuspected.

(8) See Jean-Marie Robine, Pierre Mormiche, Emmanuelle Cambois, «*Évolution des courbes de survie totale, sans maladie chronique et sans incapacité en France de 1981 à 1991: application d'un modèle de l'OMS*», *Annales de démographie historique*, 1996, pp. 99-115.



# The age limit for old age

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ARgSES<sup>1</sup>

**C**lassification by age group must follow and adapt to the various changes in aspects of sociology, demography, ideology. The lower age limit for old age is rising if we refer to definitions related to state of health and the age pyramid; it is falling if we refer to the definitions related to retirement. A new age group may emerge, between middle age and old age.

The strong decrease in mortality at all ages is a feature that is typical of demographic evolution in the 20th century. The latter was greater in children and young adults at the beginning of the century, and in elderly people after the 1960s. Accompanied by a fall in the fertility rate, this evolution has led to changes in the age pyramid which 'favour' the older age groups. Can it be said that our society has aged in the course of the 20th century?

- Before attempting to answer such a general question, many points must be made clear:
- How do we define the age limit beyond which a person may be considered as 'old'?
- Is that limit abiding, or, to be more exact, does it vary with time within a particular country? Does it vary from country to country and from region to region, from social group to social group?
- Finally, can one society be described as being 'older' than another because it contains a higher proportion of old people?

We have attempted to provide some elements of an answer to those questions as regards the possible lower limits of the age of old age and their evolution in France between 1980 and 1991. The question of the 'ageing of society', which is more complex, refers not only to the notion of the 'elderly person' in a given society, but it also supposes that we are able to shift from that notion to that of an 'elderly society'.

(1) Socio-economic health debates

## Possible definitions of the maximum age for old age

We approach the question of defining the maximum age for old age: a) from a strictly demographic point of view, b) from a socio-economic angle and c) from an epidemiological standpoint.

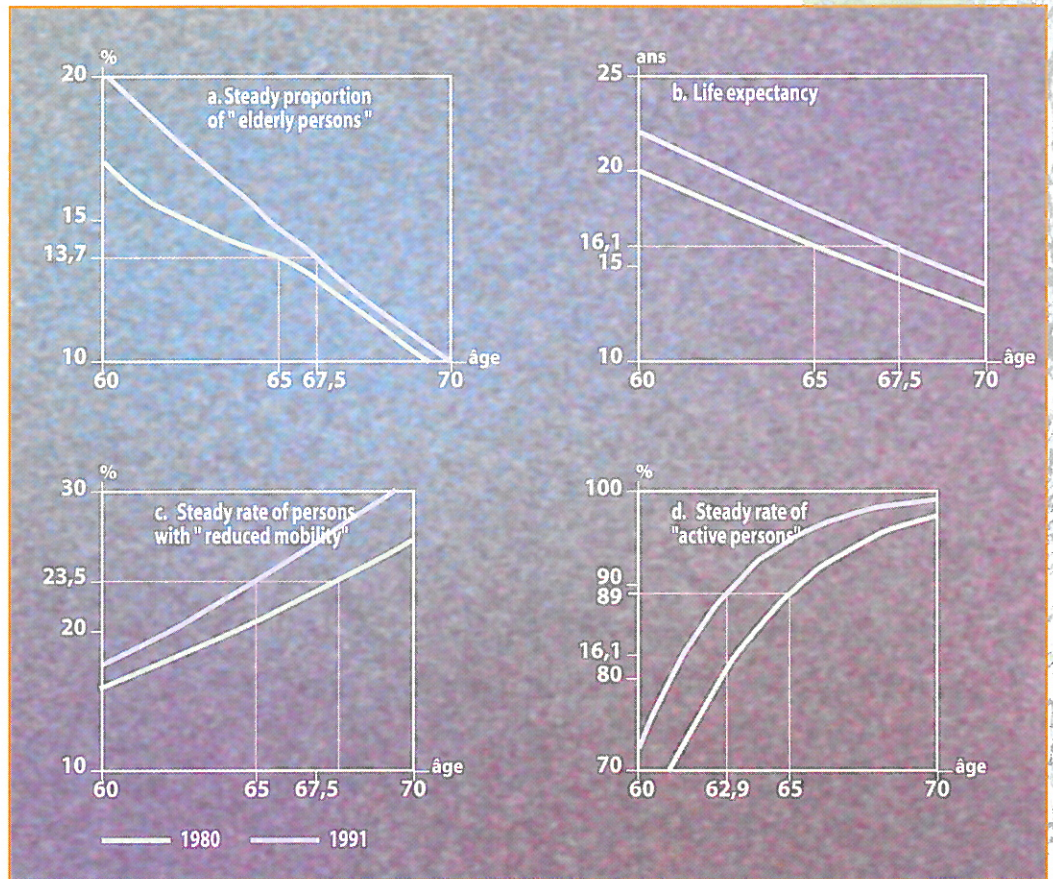
### Demographic definitions

These definitions call upon the usual demographic data: civil status, living populations, mortality, life expectancy.

#### By age...

Defining old age by age, or the time that has passed since birth, is chronologically the first answer and apparently the most obvious one; providing the civil status has been well established, it presents all the necessary conditions for a good assessment: the maximum age is easy to measure, accurate, constant (identical everywhere and at all times). However, that definition has been queried, for although it does indeed measure age or age categories, does it define 'old age'? Naturally, if we identify 'elderly person' and 'person over 65', for example, the term 'old age' does not provide us with any new elements: is it worthwhile? Would it not be better to be more accurate and speak about 'person over 65'? If, on the other hand 'elderly' and 'old age' hold a further connotation—for example, a diminished state of health or the lessening of certain faculties—is that connotation invariable? And if not, how can it be justified? Without such justification, **demographers have suggested that 'old age' should no longer be defined in relation to the time that has elapsed but in relation to the time still left to live**.

Evolution of the lower age limit for old age according to four definitions, France 1980-1991



Data: (1) Ten-yearly survey of health and medical treatment, 1980 and 1991. Rectified sampling.  
(2) I.N.S.E.E.

#### By the proportion of people in the oldest category...

We could define as 'elderly' the oldest 5% or 10% (for example) of those belonging to the oldest category. Poverty is often defined in such a way. It is a notion of relative rarity, taking into account each person's situation in relation to his environment: they stand out from other age categories because of their small number, and from their own by the scarcity of people like themselves (how many people of their generation or of generations near their own are still alive?)

With such a definition, the question of the 'ageing' of society becomes irrelevant, because the proportion of 'elderly people' remains unchanged in time by

construction. That stability is, however, quite fragile, for the limit of old age depends not only on the situation where old people are concerned, but also on the birth rate; if we were to admit such a definition, this would have to be taken into account.

There again, the limit would be higher for women than for men.

(2) In periods of demographic, epidemiological and sociological stability, such a definition poses no real problem, which is far from being the case with the very fast changes that have taken place in the 20th century; in the case of slow evolution the question may only be posed long term

(3) Cf. Bourdelais P., *†* Liège de la vieillesse, Odile Jacob, Paris, 1993, p.441.

(4) We could thus define as the limit of old age the age at which the survivors represent a constant proportion (e.g. 10% or 20%) of their generation.

### By the time left to live, life expectancy...

With the decrease in mortality, life expectancy at birth has increased considerably; it is now 77 (19 years at the age of 65); in a stable demographic regime, the proportion of 'persons over 65' is 21%, in other words, people would be 'elderly' for over a fifth of their lives. But life expectancy at birth is still rising very rapidly (by one year every four years<sup>(5)</sup>), and if life expectancy reaches 100 years, for example, old age would represent over a third of one's life!

Longer life expectancy no doubt means a better state of health. Thus, the limit of 'old age' may be defined, not in terms of the number of years since birth, but rather the number of years left to live, for example the age at which life expectancy is of 5 or 10 years (or any other short but significant duration, chosen arbitrarily). Such a definition, taking into account the connotations that go with old age, is more difficult to measure than the previous one, because it means waiting for a particular age group to die out completely, otherwise it would be based on an ambiguity, the life expectancy of the moment not being that of the cohort.

It must also be noted that this definition may be relativised by defining the maximum age of 'ageing' as the golden age for which life expectancy represents 5% or 10% of the years that have already passed.

With this definition, as with all those that follow, the age of old age varies: it is not the same in every country, in every region, in every social category. If, for example, in France, we break it down according to sex, it would be higher for women than for men.

### Epidemiological definitions

They are based on the state of health of the different generations. Although it is illusory to take into account pathological diseases and infirmities, we could nevertheless refer to those that are age-related (e.g. atherosclerosis, osteoporosis) or to the average number of chronic diseases. General indicators of state of health also lend themselves to this type of analysis.

#### By state of health of the age category...

There are no ways of measuring state of health and its evolution and they are no doubt beyond our reach in the present state of knowledge and of systems of measurement. On the other hand, a certain number of indicators to do with the consequences of disease on people's domestic and social lives are available, particularly where disability is concerned. If we take into account the evolution of disability, we may define the age limit of old age as that at which the number of persons above a particular disability threshold (arbitrarily defined) reaches a certain level, 10% or 20%, say.

Such a definition, which takes into account the connotations of decline in the state of health that go with old age, poses conceptual problems (what exactly is disability?) in defining the threshold of disability and of observation.

### Socio-economic definitions

They make use of economic or social data. Apart from professional activity, they could take into account cultural and leisure practices, family and social relationships, membership of associations various other groups, etc.

### By the situation of the age group as regards professional occupation.

We may attempt to define the age groups as regards people's economic and social role, particularly professional occupation. In order to take into account the fact that all persons in the same age group are not in the same situation as regards employment (invalids, sick people, etc.), we define the age limit for old age as the age at which the number of people without a professional occupation reaches a certain level, 80% or 90%, for example (or any other significant percentage, chosen at random).

This definition may be relativised according to the country's economic situation, and, above all, according to employment, by defining the age limit for old age as the age the percentage of persons without employment is itself a arbitrarily defined proportion (80% or 90%) of the total number of unemployed persons in the country.

At present that age limit may be calculated for men and its evolution may be studied quite easily; that is not true for women, however, whose professional activity now extends as far as the age in question (over 60): for them, the fall in professional activity because of age is artificially slowed down by the rise in the female workload.

(5) A gain of one year every year would mean immortality.

## A different evolution in the age limit for old age between 1980 and 1991 according to the different definitions

### Evolution in socio-demographic characteristics

To illustrate changes in the age limit for old age following these points of view, the information from the two national surveys into health and medical care made in 1980 and 1991 by the INSEE and the CREDES were used. These surveys provide the necessary information for all our estimations, enabling us to obtain results that are homogeneous, based on the same data (except in the case of life expectancy). The starting point is the age limit of 65 in 1980; that age is quite a good compromise between the various possible ages:

- In 1980, it was the legal retirement age;
- 13.7% of persons in the 1980 sample<sup>(6)</sup> were 65 or over, 11.1% of men and 16.1% of women;
- In 1980 life expectancy at 65 was of 16.1 years, 18.2 years for women and 13.9 for men.

### Socio-demographic features of persons aged 65 and over, used to define the age limit for old age in 1980 and 1991 by sex

	% of persons aged 65 and over <sup>(1)</sup>		Life expectancy at 65 (in years) <sup>(2)</sup>		% of persons aged 65 and over of 'limited validity' <sup>(1)</sup>		% of persons unemployed at 65* <sup>(1)</sup>	
	1980	1991	1980	1991	1980	1991	1980	1991
Men	11,1	12,4	13,9	15,7	24,4 %	21,3 %	88,4 %	95,4 %
Women	16,1	16,9	18,2	20,1	23,0 %	19,7 %	91,3 %	94,3 %
Overall	13,7	14,7	16,1	17,8	23,5 %	20,7 %	89,0 %	94,8 %

\* estimation after logistic adjustment

Data: (1) Ten-yearly survey of health and medical treatment, 1980 and 1991. Rectified sampling.  
(2) I.N.S.E.E.

The proportions or the numbers of observations are sufficient to enable a statistical analysis permitting us, after adjustment of the logistic curves to consider that:

- 23.5% of persons aged 65 suffered, in 1980, from a disability<sup>(7)</sup> that was sufficiently serious to hinder them in their daily lives, 24.4% of men and 23% of women; we shall refer to them as persons 'of limited validity',
- 89% were no longer professionally active at 65 in 1980 (88.4% of men, 91.3% of women).

Where employment is concerned, it might seem more appropriate to set the age limit at the age at which half the persons are without employment: in 1980, 50% of people were no longer employed between the ages of 58 and 59 (57 in 1991); likewise, for disability, we could set the age limit at the age at which 50% of people are 'of limited validity', in 1980, at the age of 78 (between 82 and 83 in 1991). The age limit at the outset therefore differs according to the criterion of definition.

(6) rectified to correct sampling mistakes  
(7) as defined in the sense of the indicator of morbidity of the CREDES.

Between 1980 and 1991, the evolution was marked by an increase both in number and in the percentage of persons aged 65 and over, partly due to the increase in life expectancy at 65, accompanied by improvement in state of health, and by the fact that people were giving up work earlier. The percentage of persons aged 65 and over was 13.7 in 1980 and 14.7 in 1991, i.e. an increase of 1% (1.3% for men and 0.8% for women).

Life expectancy at 65 has moved up from 16.1 years in 1980 to 17.8 in 1991, i.e. an increase of 1.7 years in 11 years—1.8 for men and 1.9 for women (the overall figure is not half way between those two figures because of an added structural effect per age according to sex).

The percentage of persons of 65 'of limited validity' has fallen by 2.8%, from 23.5% in 1980 to 20.7% in 1991 (-3.3% for women and -3.1% for men).

At 65 the percentage of persons who were unemployed was 89% in 1980 and 94.8% in 1991, an increase of 5.8% in 11 years, 7% for men and 3% for women.

### Age limits for old age seen from different points of view, and their evolution

65 was chosen as the age limit for old age on every level in 1980; the age limit in 1991 differed in the criteria used. Furthermore, not only does the evolution vary in its extent but the meaning of that evolution is different: as the case may be, one was 'old' later or earlier in 1991 than in 1980.

- With the definition of age as on birth certificate, i.e. the number of years that have passed since birth, the lower age limit for old age is 65 in 1980 and in 1991.
- The percentage of persons aged 65 or over was 13.7% in 1980; the same percentage in 1991 would include only persons over the age of 66.1 years, i.e. an increase of 1.1 year.
- Life expectancy at 65 was 16.1 years in 1980; a person aged 67.5 years had that same life expectancy in 1991. The age of old age has shifted by 2.5 years. The percentage of persons going beyond that age limit (age for which life expectancy is stable, at 16.1 years) has fallen by 2% in the period studied, 13.7% in 1980 and 11.7% in 1991.

- Generally speaking, the increase in life expectancy indicates an improvement in state of health, which is translated by a decrease in disablement at all ages: the proportion of persons 'of limited validity' decreased by 1.5% between 1980 and 1991, from 13.7% to 12.2%. 23.5% of persons aged 65 were 'of limited validity' in 1980; with a definition of old age based on a steady proportion of persons suffering from disability, we find the same proportion of persons 'of limited validity' at the age of 67.5 in 1991. The age limit, if we use that definition, has moved back 2.6 years in 11 years.
- On the other hand, if we take as our reference retirement, considered as a break with former habits and symbol of the beginning of old age, we take the end of professional activity as the significant variable, while the age of old age has fallen. With an age limit such that the proportion of persons who are no longer at work is constant (89%), the threshold of old age, instead of being 65 as in 1980, was only 62.9 in 1991; a loss

### Age limits for old age according to the definition - France 1980-1991

Criteria of definition	Person's age limit		% of 'elderly at age limit (over that age limit)		Life expectancy 'of limited validity' at age limit		% of persons 'of limited validity'		% of unemployed at age limit	
	1980	1991	1980	1991	1980	1991	1980	1991	1980	1991
Age	65 years	65 years	13.7 %	14.7 %	16.1 years	17.8 years	23.5 %	20.7 %	89 %	94.8 %
% of oldest	65 years	66.1 years	13.7 %	13.7 %	16.1 years	15.4 years	23.5 %	21.8 %	89 %	96.5 %
Life expectancy	65 years	67.5 years	13.7 %	11.7 %	16.1 years	16.1 years	23.5 %	23.4 %	89 %	97.9 %
% of persons 'of limited validity'	65 years	67.6 years	13.7 %	12.2 %	16.1 years	14.5 years	23.5 %	23.5 %	89 %	98 %
% unemployed	65 years	62.9 years	13.7 %	16.9 %	16.1 years	17.8 years	23.5 %	18.5 %	89 %	89 %

Data: Ten-yearly survey of health and medical treatment, 1980 and 1991.

of 3.1%. The percentage of persons who have passed that threshold, 13.7% in 1980, increased to 16.9% in 1991. We must remember that this phenomenon is not due only to deterioration in the employment situation during that period; the long-term tendency since the beginning of the century is to a decrease in the duration of work throughout one's life

### The age limit, between middle age and old age

The age limit for old age increases with the definitions related to state of health and the age pyramid and decreases with the definition referring to retirement. **This difference in the age limits may lead to a new age group between middle age and old age**, but it would be accompanied by profound changes in the arrangement of demographic groups, between them and in their relationships to the various aspects of economic and social life.

According to the types of works and the objectives sought, we are therefore led to use different limits for the different ages of life; those limits correspond to a breaking-down of the population into categories that may lead to differing conclusions. These definitions are, in a way, therefore, partly contained in the definitions of the limits.

Thus, for example, according to whether one is interested in financial problems to do with retirement or to the production of health care, one will choose one definition or the other. Like all the categories in the social sciences, the classification into age groups cannot be immutable, it has to follow and adapt to changes in the various economic, social, demographic, ideological etc. aspects, the limits between adolescence and adulthood, and between middle age and old age can but fluctuate and be adapted to the object of the study, on the one hand, and to the period, the country, or even the socio-economic group, on the other.

(8) This threshold would certainly be higher for women and therefore on the whole, if it were not partly disturbed by the limited access to jobs of women of that generation.

## Viewpoint

# Causes and consequences of the ageing of the population

The demographer and economist

### Didier Blanchet

is head of research at INED<sup>(1)</sup>

and director of ENSAE. He is the author of several studies on the subject of ageing and its economic implications.

Here he gives his own personal views.

#### Les Cahiers: You don't care for the term 'ageing of the population'...

*Didier Blanchet: Like Patrice Bourdelais, I think the word 'ageing', when applied to the population, is not the right term. It has too many connotations nowadays.*

#### Les Cahiers: Maybe, but it's the term everyone uses...

*Didier Blanchet: You're right and I use it myself, but as an easy way of referring to the 'increase in the percentage of persons aged 60 and over in the population as a whole', which is much more accurate, perfectly neutral but, I agree, impossible to use.*

#### Les Cahiers: What are the reasons for the increase in the number of persons aged 60 and over in France?

*Didier Blanchet: This phenomenon is above all the result of an increase in the number of elderly people, rather than a decrease in the number of young people. That is an important point. And there are two reasons for the increase in the number of elderly people: increased life expectancy and the effect of the baby boom.*

#### Les Cahiers: Yet traditionally demographers have always pointed to lower fertility as the main cause of ageing in a population.

*Didier Blanchet: Yes, and they were quite right to do so but only when studying the evolution of the French population, between, say 1800 and 1950, or in the very long term.*

*The argument which regularly crops up, is that, because of the fall in the birth rate, there will soon be no one to pay for pensions, but I do not think that is true, at least until after the first third of next century. Moreover, I think that has become the general opinion. Every symposium on the subject of retirement now begins with a ritual reminder that, each year, we gain 3 months in life expectancy and that the generations of tomorrow that are going to benefit are those of the baby boom.*

#### Les Cahiers: In other words, the problem of paying for tomorrow's pensions will remain on the political agenda, whatever changes there may be in fertility.

*Didier Blanchet: Exactly. If I had to, I would put the factors explaining the expected ageing of the French population in the following order:*

*- First of all there is a basic move towards an increase in life expectancy.*

*That is to say, the fact that in generations of the same*

(1) National Institute of Demographic Studies

initial size a) more people survive to retirement age (even though there are still great social differences) and b) those who have reached retirement age live much longer than before.

- Secondly, the fluctuations in fertility in the past affect the 'calendar' of this phenomenon.

The baby-boom generations have so far put off the ageing of the population; we are now feeling the benefit of that. Those same generations will speed up the ageing of the population from 2005 onwards, when they reach retirement. In recent years, ageing has also been delayed by the fact that the generations reaching the age of 60 were themselves small, as a direct or indirect result of the Great War.

- Thirdly, we must mention the present and future fertility rate, which may play a very important role, but only in the very long term.

**Les Cahiers: You have said nothing about the part played by migrations.**

*Didier Blanchet: Migrations should be mentioned, rather for the part they play in moderating ageing, but that part is very limited on a national level. We may notice it in the past, we may foresee it in the future, with projections under alternative, realistic migration scenarios. We may also take the problem from another angle, as I have sometimes done, and evaluate the migration level that would be migration level necessary to avoid the problem of ageing. We very soon realise that the levels would be absolutely astronomical, which goes to show that migration can only play a secondary role in correcting the phenomenon.*

**Les Cahiers: If the causes of ageing have been quite well defined, what may be said of their consequences?**

*Didier Blanchet: We can also try to arrange the consequences of ageing in order of importance. Firstly, I would say that the consequences are unquestionable where retirement is concerned. But those consequences must not be seen deterministically, for I believe that there are many possible options. But it is clear that ageing affects all*

*those possible options. It is not possible to maintain the age of retirement, the mode of financing pensions, the rate of obligatory contributions and the relative purchasing power of pensioners. So there will have to be arbitration (and there is already arbitration, though it is not always clearly defined, unfortunately).*

*In fields other than retirement, I think the consequences of ageing are much more limited; this can be proved without even mentioning Pierre Bordelais's arguments about the relativity of age.*

**Les Cahiers: By 'the relativity of age' you mean the fact that a sexagenarian nowadays has very little in common with his counterpart of years ago?**

*Didier Blanchet: Yes. Let me explain. Ignoring the relativity of age means limiting a particular behavioural pattern by age to its structure as it is today —for example, expenditure on health per age group— and seeing what that structure would mean in terms of average per capita expenditure when it is applied to structures per age group for 10, 20 or 30 years hence. But that only gives very weak results. In the case of health expenditure, for example, that was proved a very long time ago'. It has been regularly discovered since and the same is also true for consumer structures, etc.*

*Why? Because the profiles per age where such behaviour is concerned are progressive enough and staggered enough agewise to avoid significant interaction with the variations in structure by age.*

*Dependency is the only field in which the effect of ageing may be significant. But it is also a field in which the argument of relativity may be brought fully into play. We then get back to the theory of the reduction of morbidity or, shall we say, the idea of a relatively stable length of time between the beginning of disablement and death. Dependency is not so much a question of age as a question of the number of years left to live.*

(2) Cf. Arié and Andrée Mizrahi (op. cit.), «The age limit for old age».



**Les Cahiers:** So you would agree with Patrice Bourdelais when he puts forward the idea of calculating the number of persons with five or ten years left to live, rather than the number of persons aged 60 and over...

*Didier Blanchet:* Yes and no. Yes, for the question of dependency, but no when dealing with the subject of retirement. Where the latter is concerned, we are faced with a phenomenon that is not progressive with age, but of the all-or-nothing type. Retirement is a threshold effect. One is retired at 60; one is not retired before 60. The effects of the swing in the demographic structure are much more important. Here, the argument of relative age does not come into it, or at least should not come into it from the outset. Let me explain. Perhaps in the near future the problems of retirement will be solved by raising retirement age, and then we shall be able to say, *ex post*, that age only played a relative part where retirement was concerned. But putting forward that argument, *ex ante*, means putting forward just one adjustment variable among others, before having explored all the solutions to the problem. Therefore, it seems to me perfectly legitimate in this case to work from the usual demographic projections.

**Les Cahiers:** Certain economists mention, as one of the many consequences of the ageing of the population, the risks of conflict between generations.

*Didier Blanchet:* Indeed, an approach in terms of politico-economic balance has led certain economists to forecast increasing conflicts of interest between generations. They maintain that the problems of retirement will be accompanied by a greater political influence on the part of retired people which, by lobbying effects, could worsen the problem. This theme is quite relevant in the USA where there seems to be a great deal of lobbying by the retired population. I would be more cautious where France is concerned. Such models are nevertheless based on representations of electoral behaviour that are rather naive and they minimise the phenomena of altruism between the generations which are beginning to be explored on the private level.

**Les Cahiers:** You therefore maintain that the only domain where ageing will raise obvious problems is that of retirement, which will have to be managed on a national level. Should we therefore conclude that ageing will have only minor effects on a local level?

*Didier Blanchet:* A priori that is my opinion. But I would like to suggest a number of courses that could lead to more balanced conclusions.

Firstly, the fact that ageing on a local level may be much stronger than on the national level. But that depends what we mean by 'local level'. If we are talking about the Ile-de-France, that is not the case: Mariette Sagot's studies<sup>(3)</sup> clearly show that ageing will be less marked in the Ile-de-France than in the rest of the country. On the other hand, within a particular commune, ageing may be a much more rapid phenomenon with an important impact in terms of needs, infrastructure, etc.

On the local level, there is also a greater risk of accumulative-type phenomena in which ageing leads to ageing. We may mention the theory of local public property and arrive at problems of politico-economic balance. The idea is as follows: if the aged population manages, on a local level, to monopolise a part of local resources, in that case, if the younger population responds by not bothering to vote, there is a likelihood that ageing phenomenon will be increased. This cumulative effect could be merely temporary, however, since Philippe Louchart<sup>(4)</sup> also shows that there is another, self-regulating mechanism which works in the other direction, linked to the constant renewing of the population resulting from the death of those old people, at least in areas that are attractive to young people.

(3) *Cf. infra*, Mariette Sagot

(4) *Cf. infra*, Philippe Louchart

**Les Cahiers: Don't you think, too, that the decisions made on a national level to manage the problem of retirement will have a backlash effect on a local level?**

*Didier Blanchet: If it is decided to raise retirement age, and if the decision can be implemented (the question is open), it is very likely that that will lead to changes in the dynamics and organisation of the job market and that local policies will have to take that into account.*

*Today the problem of the age of retirement shows the emergence of a conflict of interests involving three parties: firstly, wage-earners and pensioners; secondly, employers; and thirdly, the social welfare services which deal with pensions. In the past, those three categories agreed that the retirement age should be lowered. Now the last category believes that the age of retirement cannot be lowered any further; wage-earners themselves are beginning to realise that they will have to retire later. But employers take the opposite attitude both in word and deed. Early retirements and the number of people who find themselves unemployed at the end of their careers illustrate this. Furthermore, France is one of the European countries with the fewest members of the working population between the ages of 55 and 59. Finding a solution to such contradictions is, I believe, an important stake both on a local and a national level. Likewise, according to the policies that are adopted in terms of standard of living indexation for pensioners, the progression of their purchasing power will be different, which may have effects on their migratory behaviour and their residential strategies<sup>(5)</sup>.*

(5) Cf. *Infra*, Philippe Louchart

# France's ageing population: a tremendous challenge

**Hugues de Jouvenel**

General director of «Futuribles»

**T**he steady ageing of France's population poses a tremendous challenge. Preventive measures will have to be taken at once in order to tackle problems which could, in the very near future, become highly explosive. **Hugues de Jouvenel, director-chief editor of Futuribles, explains the trend, and addresses the perspectives on the aging of the French population. He outlines the phenomenon's «direct effects,» and shows why many population forecasts are, by all appearances, disputable.**

The future has not been predetermined. Many different scenarios are still possible for the future (which we refer to as futuribles). Whether they will come about, or not, depends in large part on human actions and decisions. Nonetheless, it would be naive to pretend that anything is possible, or that the future will spring from a void. The future is a direct descendant of the present, which is itself the reflection of major trends that developed in the near or recent past, the consequences of which seem altogether inevitable in the distant, or not so distant, future.

The rise in the median age of the French population is a case in point. This ageing is the result of a decreasing birth rate and longer life expectancies. The trend has led to a steady increase in the percentage of elderly people in the country's overall population. This age group encompasses all citizens over a given age (either over 60, or over 65). It is generally agreed that the age itself is arbitrary, and has hence varied over the years.\* France's population is ageing and will continue to do so both in the mid- and long-term (2020 and 2030), as is the case in all industrialized countries, even if the trend's intensity and timetable differ from one country to another.

In a static social and economic system, it is easy to understand why this trend has given rise to much concern about the financing of future retirement pensions. French retirement pensions are financed by contribution. In consequence, the country could find itself with a dangerous imbalance between the number of retired persons, which will continue to increase, and the number of employed persons making regular payments to their elders' retirement funds. And since the elderly are not as healthy as their younger counterparts, many wonder how the state will finance the ensuing health costs, which tend to «automatically» increase with age.

In more general terms—and rightly or wrongly—many people see ageing as something inherently negative. It has prompted a good deal of deliberately alarming talk. And though economists have done their best to provide answers, their analyses have often contradicted each other. The problems induced by the ageing of the population are often underestimated, most likely because many believe—wrongly—that they will not come to a head until much later (after 2005/2010). Consequently, they see no reason to make them a current priority.

### The steady ageing of the population: a deep-seated and irreversible trend

The biological ageing of every individual from birth until death is an obvious fact. Nonetheless, the onset of handicaps linked to age has been deferred; some have even been wiped out. With the exception of accidental death, people are dying later and later.

Clearly, «turning 60» had an entirely different meaning in 1900, than it does in 1998. In all likelihood, the 60-year-olds of the year 2030 will have very little in common with their ancestors from the interwar years, except their «age.»

I shall focus on the ageing population, which has become a crucial issue, and often a dreaded social phenomenon, due to an increase:

- in the median age of the French population;
- in the percentage – and number – of elderly people in the overall population (defined either as those over 60, or for international comparisons, those over 65), which is growing and will grow even more rapidly when the generations born during the baby boom reach the «fatal» 60-something mark (even though coming generations are smaller in number).

In order to ward off any fruitless debate, we will make a clear distinction between changes observed over the past, and speculations about the future.

We know the number of annual births from the beginning of the century, as well as the survival rate for each given year. As concerns the more recent past, we know that the postwar years were characterized by two successive periods (the baby boom, then the baby crack), which resulted in the current imbalance between France's different age groups.

It is thus easy to understand, for instance, that the percentage of youths under 20 is decreasing: dropping from 34.2% in 1966, twenty years after the start of the baby boom, to 25.8% in 1998. It is also easy to understand why the number and percentage of people over 65 has steadily

increased: 4.4 million (or 11%) at the time of the Liberation; 5.8 million (12%) in 1965; 6.7 million (13%) in 1972; 7.5 million (14%) in 1980. This growth came to a standstill when those born between 1914 and 1918 (the age groups depleted by war deaths) reached 65, then took off again in 1986. The figure was back up to 14% in 1991, this time representing some 8.0 million people. On January 1st, 1998, there were 9.17 million elderly people in France, or 15.7% of the overall population<sup>1</sup>.

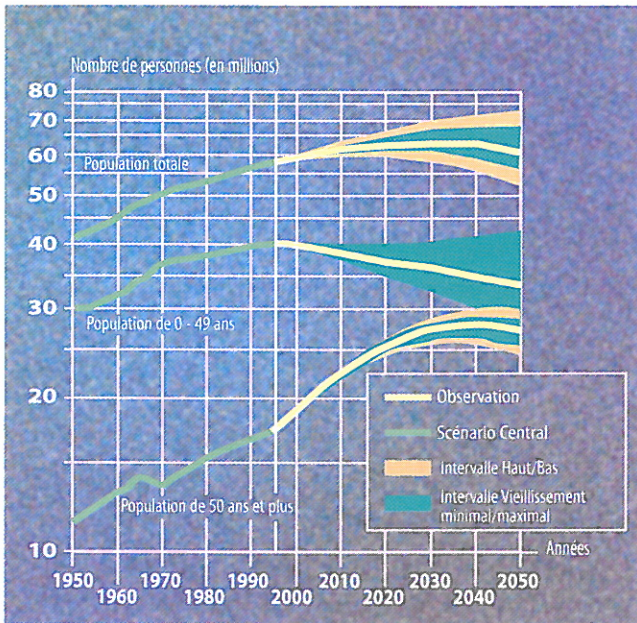
**The current increase in the number of elderly people is the result of earlier jumps in the birth rate** — after deducting deaths and making corrections for waves of migration — which determine the number of people now reaching the age of 65. **It is also the result of an ever increasing decline in the death rate among older persons:** between 1960 and 1990, life expectancy after age (à 65 ans) 65 rose 3.5 years for men, and 4.5 years for women<sup>2</sup>.

What does the future hold in store? Several scenarios have been proposed for the year 2050, most notably by INSEE (the National Institute of Statistics and Economic Studies), and by Eurostat's Central Bureau of Statistics (the Netherlands). Ignorant both of future developments and their precise causes, the organizations making these forecasts often put forward highly contradictory (and yet overly simplistic) hypotheses, in particular on the subject of fertility. The various hypotheses are presented in the estimates given below.

(1) LEVY Michel-Louis. «La population de la France, 1995-1997». *Population et Sociétés*, n°333, mars 1998.

(2) PARANT Alain. «Longévité et Retraite». *Population et Sociétés*, n°310, février 1996.

**Projected growth of the French population**  
*(Observations up to 1995 - Estimates by CBS/EUROSTAT beyond)*



Source: CALOT Gérard & CHESNAIS Jean-Claude (under the direction of), «Le vieillissement démographique dans l'Union européenne à l'horizon 2050», Collection: Travaux et Recherches de Prospective, Futuribles International, Paris, 1997, 171 pages.

In keeping with the concise nature of this article, we have no intention of presenting every possible scenario. Yet the results of these projections —based on hypotheses which are, in the end, very similar— testify to the widespread uncertainty about population levels at the close of the period in question. They also show that this uncertainty varies for each different age group, and that certain trends appear to be altogether inevitable.

Even in the most optimistic scenarios for the renewal of the country's population, the number of births will just barely maintain the under-50 age group at the same level until the year 2050. In contrast, all the scenarios predict that the over-50 age group will continue to grow, jumping from 18 million in 1995, to between 25 and 30 million by 2050.

The percentage of the population above 60 could rise from around 20% in 1995, to 22-24% in 2010, and 27-33% in 2030. With this in mind:

- in my opinion, we must give serious consideration to the most pessimistic fertility estimates. The fertility indicator in Germany, for instance, has been under 1.5 children per female since 1975, while fertility rates in Spain and Italy now hover around 1.2 and 1.3 respectively.

**The most extreme case scenarios**

	Fertility	Life expectancy	Migration balance
INSEE 1995	1,6 à 2,1	Men : 82,2 years Women : 90,4 years	+ 50 000
CBS/EUROSTAT 1996	1,6 à 2,1	Men : 76,0 years à 83,0 years Women : 84,0 years à 88,0 years	from + 30 000 to + 70 000

- highly contrasting scenarios on migration waves should also be taken into consideration, paying special attention to the breakdown of the migrants' age groups. It is entirely possible to imagine, for instance, that young French men and women will go abroad, or that elderly people from foreign countries (for instance from northern and central Europe) will settle in France.

Finally, it should be noted that the number of elderly people rises with every successive age group.

The number of people reaching the age of 60 will rise spectacularly, starting sometime around 2005/2010. These people will also live increasingly longer lives. We will hence see a fast increase in the number and percentage of elderly people in the overall population. Within this group, the number of extremely old people (above 80) will rise sharply. They will be highly dependent on others, which will give rise to numerous new problems.

## The impact of ageing on society

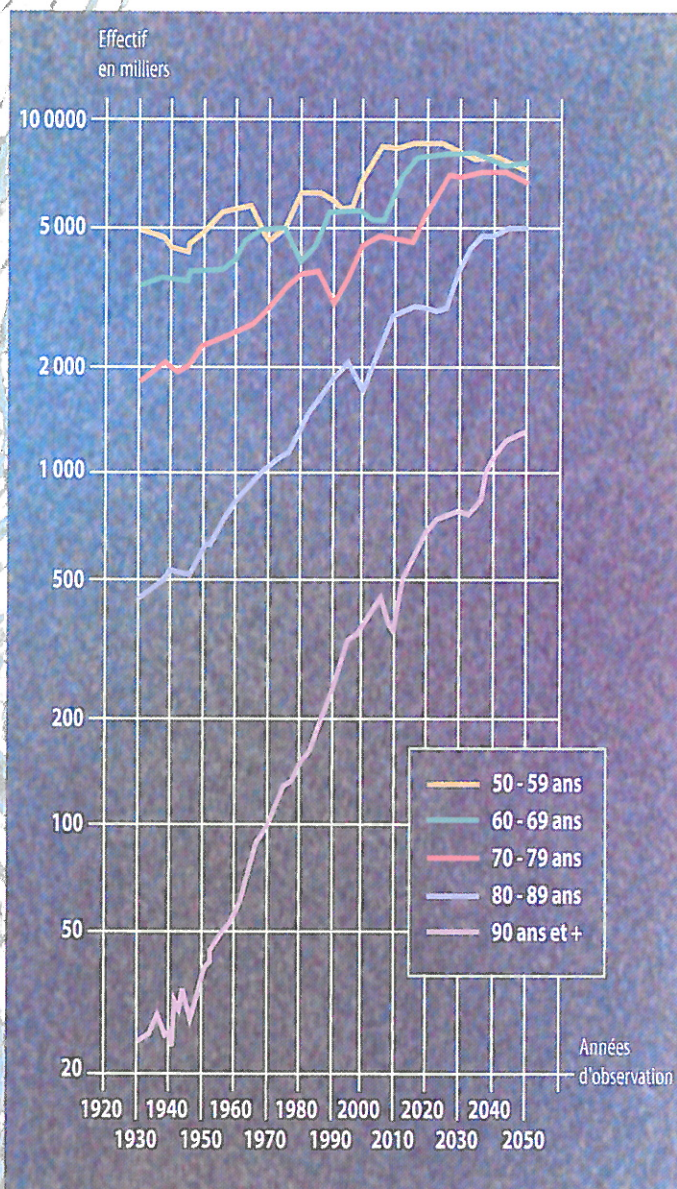
We cannot forget that every one of us is growing older. Aging affects every age group, including the working-age population (20-59 years old), and the working population itself. This trend has, of course, been offset by early retirements. Yet it has become even more pronounced with the increasingly late arrival of young workers on the labor market.

The internal ageing of the working population is not without consequences. Firstly, because salaries are based largely on seniority, and as long as this is the case, labor costs will «automatically» rise right along with the workers' age. Secondly, because the time has come to take a long hard look at the capabilities of an ageing population, in particular its ability to adapt to rapid changes in the production system. This aptitude will clearly depend on how much new training they are given, and the terms and conditions of this training.

There is much to be said about this issue. However, for our present purposes, we will confine ourselves to **the consequences of the rise in the number and percentage of elderly people in the overall population**. These consequences can be seen at several different levels:

- in rises or dips in retirement costs, and the purchasing power of elderly people;
- in rises or dips in health costs, excluding the rationing of services paid for by the state;
- in rises or dips in savings, and the breakdown of assets, most of which are in the hands of elderly people (possibly even to a greater extent);
- in household consumption, demand, and, consequently, in economic growth dynamics.

France - Estimates for the number of citizens over 50, by age group  
Principal forecast CBS/EUROSTAT



Source: CALOT Gérard. Op. cit., and FUTURIBLES: «Vers une prospective des retraites en France à l'horizon 2030». Op. cit.

## A sharp increase in public spending for retirement and health since 2015

Most available studies are concerned with government spending on health and retirement. There are two basic categories: the first strives to evaluate the «direct effects» of ageing, based on the assumption that things will otherwise remain the same. This is the case in the study conducted by Gérard Calot: «Aging in the European Union by 2050»<sup>(3)</sup>. The others take different factors into consideration, introducing numerous variations on the various elements which come into play. The Briet Report is a good example,<sup>(4)</sup> or the studies carried out, for instance, by the OECD and the World Bank<sup>(5)</sup>.

We must, however, insist on the fact that the results of these studies are dependent upon initial hypotheses which are highly disputable. This is clear—as we saw above—in the case of population forecasts. They are even more debatable when it comes to measuring the direct effects of aging, because the authors assume that all other factors will remain stable (for instance, health costs by age group). The studies become highly questionable when the authors try to cover a wide variety of factors: economic growth, productivity, employment, rises and drops in prices, etc. They thus predict, in one fell swoop, everything under the sun: from total recovery from the impact of aging thanks to full employment; to pushing back the standard retirement age; to salary cuts or hikes; to changing the amount of retirement pensions.

Clearly, there are several different combinations of factors which, at least in theory, will help to offset the negative effects of aging. Yet there is no proof that even the most probable are really possible. By masking the problem, they will, in all likelihood, only make it worse.

(3) CALOT Gérard. «Le vieillissement démographique dans l'Union européenne à l'horizon 2050». Coll. Travaux et Recherches de Prospective. Paris: Futuribles International, 1997, p.171

(4) BRIET Raoul. «Perspectives long terme des retraites». Paris: Commissariat Général du Plan, 1995.

(5) For example, OECD. «Le vieillissement dans les pays de l'OCDE: un défi fondamental pour la politique». Paris: OECD, 1996.

### The impact of ageing in the European Union: 1995-2045. Consequences on current social welfare systems

Ajustement compensateurs des effets du vieillissement	Scénarios									
	Bas		Central		Haut		Vieillesse minimal		Vieillesse maximal	
	UE	F	UE	F	UE	F	UE	F	UE	F
<b>Assurance maladie</b>										
- Majoration du taux de cotisation (%)	24-59	(40)	27-67	(46)	29-68	(46)	12-41	(27)	47-92	(63)
<b>Assurance vieillesse</b>										
- Majoration du taux de cotisation (%)	44-101	(51)	43-96	(51)	40-81	(45)	21-53	(33)	57-135	(63)
	26-77	(48)	24-71	(47)	23-100	(42)	10-81	(32)	39-92	(57)
- Baisse des pensions par rapport aux salaires (%)	37-56	(45)	37-54	(44)	37-51	(41)	21-42	(33)	48-64	(51)
	28-54	(42)	26-52	(42)	25-62	(39)	12-55	(31)	38-61	(48)
- Augmentation de l'âge de départ en retraite (années)	5,7-11,1	(8,8)	5,8-11,4	(9,6)	5,9-12,1	(9,4)	2,4-8,4	(6,3)	9,4-14,5	(11,7)
- Croissance du nombre d'actifs (%)	59-125	(80)	59-118	(80)	58-103	(70)	27-71	(49)	91-178	(105)
	38-119	(72)	35-108	(73)	33-165	(64)	14-124	(45)	60-155	(92)

Source: PARANT Alain, «Le vieillissement démographique dans l'Union européenne», Population et Sociétés, n°321, February 1997.

The «direct effects» of ageing on social welfare systems—in other words, the changes resulting directly from the variation in the population's sex and age—have been, until now, very modest. In contrast, the Calot report shows that considerable changes should take place in coming decades, which will require very painful adjustments. The table sums up the report's principal findings.

The study shows that, for the hypothesis presented in the main scenario of the CBS/EUROSTAT forecast, for a 15-member Europe from 1995 to 2040:

- in order to fully compensate for the rise in health costs induced directly by ageing: health contribution rates would have to be increased by 53%; or retirement rates would have to be cut by one-third;
- in order to balance pension schemes: retirement contribution rates would have to be increased by 49%; or pensions would have to be cut by 43% in relation to salaries; or the retirement age would have to be pushed back by 9.9 years; or the working population would have to be increased by 75%, without raising the retirement age, but instead increasing activity levels (mainly for women) or encouraging new immigration;
- if it is assumed that the effects of ageing on the welfare system can be offset only by an increase in health and retirement contribution rates, this increase will have to amount to a 25% drop in production per worker (compared to a scenario which excludes ageing), or an average of 0.5% per year. In the hypothetical case of economic growth comparable to the «Thirty Glorious Years», the effect on the economy would be relatively small; it would be, in compari-

son, much stronger if the economy continues to grow at the same rate it has over the last twenty years.

It is difficult to compare the results of this study with those presented in other studies carried out for the Commissariat Général du Plan, the OECD, or the World Bank. The others consider additional factors, most of them economic in nature, such as changes in the purchasing power of pensions compared to salaries, and the maturity of pension plans. **Yet all the different scenarios make one thing clear: charges linked to retirement pensions and welfare benefits will rise sharply, in particular between 2005 and 2035.**

It appears that France will find this increase more or less tolerable, depending most notably on its rate of economic growth, the volume of employment, the increase in salaries (and thus the tax base), productivity gains, etc. Let's assume that the ageing of the population will indeed lead, before 2035, to a sharp increase in public spending for retirement and health. In this case, we could also suppose that these costs could be divided equally between the working population and retirees, and, according to certain authors, could be spread out over several years<sup>6</sup>.

In a favorable economic situation, the additional expenditure linked directly to ageing will not necessarily be as dramatic as is often claimed. Having said this, no one can say what the economic situation will be like in 2005-2010, but employment will continue to be—by far—the most important variable in economic adjustment. The real question is whether the volume of employment will really grow along with payroll, or whether the expected increase in the number of people working will be the result of a more equi-

table division of the job shortage (for instance, through a reduction in the number of hours worked, accompanied by a corresponding reduction in salary which is not good for balancing the social security system).

## Lengthening the period of active employment in relation to life expectancies

The least painful solution would probably be to defer the retirement age or, even better, lengthen the period of active employment in relation to life expectancies. This would, most importantly, make it possible to strike a balance between the working population and the retired population. This is, in substance, what many demographers<sup>7</sup> have been recommending for quite some time. They denounce the falling ratio of people in the 20-59 age group, to those in the over 60 group, which stood at 2.7 in 1995, and could be cut in half before 2050, continuing to drop to levels between 1.3 and 1.8 for men, and 1.0 and 1.3 for women.

**Keeping the burden on the working population in check, by setting an immutable numerical relation between workers and retirees, would lead to a substantial increase in the standard retirement age.** INED (National Institute of Demographic Studies) has already spelled this out quite clearly<sup>8</sup>.

(6) We must stress that this point is arguable, as expenditure will increase dramatically between 2005-2010.

(7) See PARANT Alain. «Longévité et retraites». *Population et Sociétés*, n°310, février 1996.

(8) Cf INED «Dix-septième rapport sur la situation démographique de la France». Paris : INED, 1988.



If our goal is to keep the ratio at 2.7 until the year 2050, then the crossover age would have to increase slowly at first (one-half year from 1995 to 2005, from 60 to 60.5 years), then much more rapidly afterwards (from 9 to 12 years, depending on the scenario, over a period of 45 years)\*.

Men would hence retire between the ages of 70 and 72 (men born around 1980). In view of life expectancies for 2050, their retirement would last from 16 to 18 years, while women's retirement would range from 20 to 22 years.

It would be even more astute, instead of thinking in terms of retirement age, to reconsider the number of years of contribution needed to qualify for full retirement. This option would imply changing the number of mandatory years, taking social inequalities concerning death into account, as we are all aware of the considerable differences in life expectancies between the various socio-professional categories.

Though France unfortunately did not resort to this subtlety, it was nonetheless one of the principal measures introduced during the retirement reform enacted in 1993 (Veil Law), which stipulates that the number of years of contribution needed to qualify for full retirement will progressively rise from 37.5 to 40. The reform only affected salaried employees in the private sector and did not include special retirement schemes.

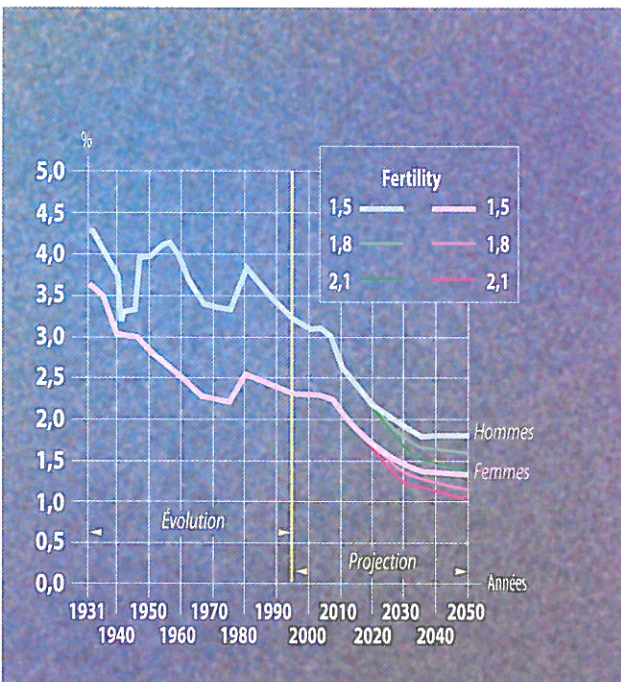
As for the consequences on the volume of employment, the effects of an increase in the crossover age between working life and retirement would be very similar to the effects of an increase in activity rates per age group, which could be combined with the immigration of workers. However, there is little chance that these scenarios will come to pass, at least not in the near or mid-term future.

## Employment: the key variable

It is not enough to increase the number of people working. They must also have «regular»<sup>11</sup> jobs. But there is a job shortage in France. The government has made great efforts to postpone the arrival of young people on the labor market, and to encourage older employees to take early retirement. And yet, despite these measures, France is still plagued by a high unemployment rate, and particularly dramatic underemployment.

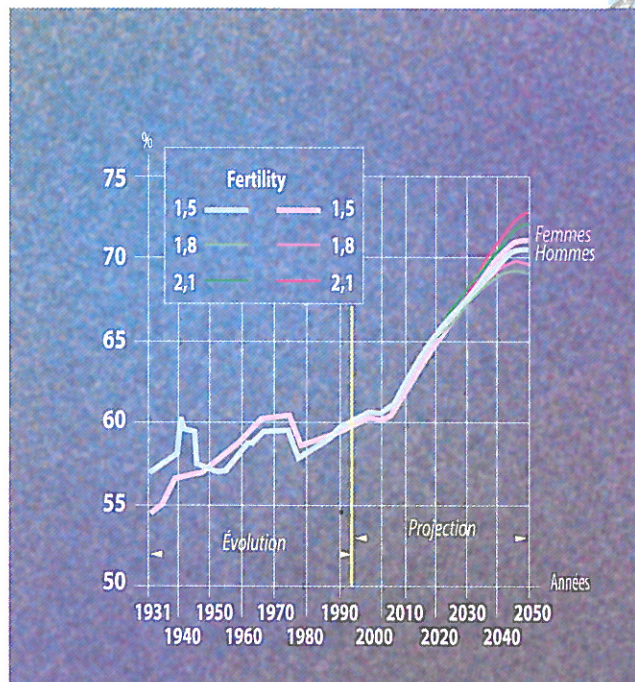
(9) PARANT Alain, «Longévité et retraite», Op.cit.  
 (10) «Regular job»: a job that provides whomever performs it a salary that covers the person's essential needs and serves as a tax base according to the current rates. Such is not the case for «assisted» jobs, which increased by 1.15 million from 1973-1994. During this period, the number of «hors mesures» jobs decreased by nearly 900 thousand units! (source : Ministry of Labor and Social Affaires sociales, DARES «40 ans de politique de l'emploi», Paris, Documentation Française, doc. 1996.)

Ratio of 20-59 age group, to over 60 group



Source: PARANT Alain, «Longévité et retraite», op. cit.

Crossover ages between working life and retirement



Source: PARANT Alain, «Longévité et retraite», op. cit.

Let us make no mistake concerning the real employment figures. The graph given below, for instance, shows that though overall employment did increase slightly between 1973 and 1994, this was mainly due to "assisted"<sup>(11)</sup> employment in the commercial and non-commercial sectors. In contrast, non-assisted employment declined.

Notwithstanding this remark – which has its importance, as a number of "assisted" forms of employment are entirely or partly exempt from contribution – it is also necessary to clearly understand the actual employment situation. It is commonly measured according to the unemployment rate which, let us always keep in mind, reports the number of unemployed persons in relation to the working population. The latter, in turn, is comprised of both employed and unemployed persons. This indicator does not really seem relevant, above all when it does not include information concerning the activity rate. For ins-

tance, let us take a look at the situation in three countries where the working-age population and the unemployment rate (10%) are similar (see chart below). Nonetheless, it clearly shows that the proportion of employed persons and that of unemployed persons vary greatly.

Therefore, we prefer to speak of the employment rate; it reports the proportion of working-age persons actually employed (although those who benefit from assisted employment are not differentiated). The chart on the following page shows the employment rates calculated by the OECD. It is based on a working-age population between 15 and 64.

The rises or dips in the employment rate in France over the last twenty years is quite revealing, falling from 63.8% in 1972 to 58.5% in 1992! The contrast between European countries is just as startling: some – with Scandinavian countries in the lead – have an unemployment rate of around 75% and has increased; others – including France – have an employment rate that is falling under 60%!

This signifies, in contrast, that in 1996 the active pool of labor in France aged between 15-64 represented 40.4% of the people in this age group (compared to 25.3% in Denmark). Incidentally, this explains why when ten jobs are created in France, more than half benefit non-working, non-unemployed persons rather than entirely serving to reduce the number of unemployed persons.

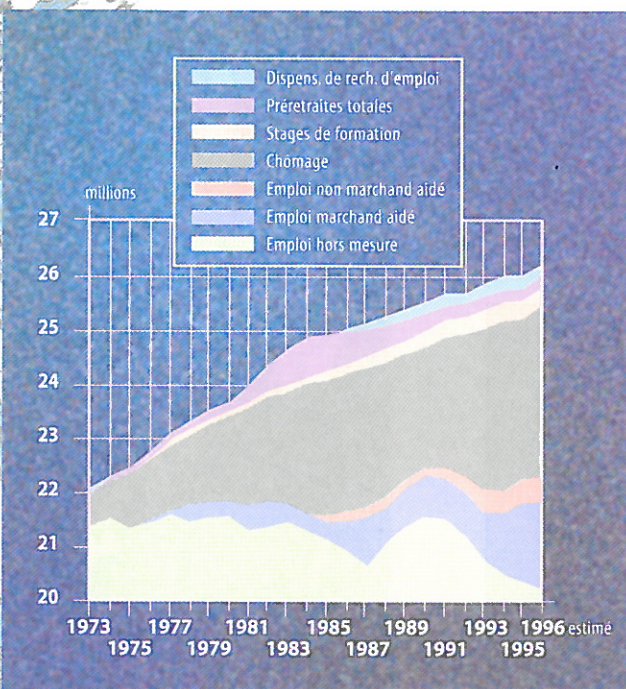
It also explains why — before being in a position to defer the retirement age — **we would have to create millions of jobs for the non-working, working-age population. Some of them are declared as unemployed, and many are quite simply classified as non-working, including those in the 20-59 age group!**

In clear terms, between 1975 and 1995 the Americans created 37 million jobs, while the five principal European countries only created 2.4 million. The Americans made adjustments through salaries, whereas the Europeans, on the whole, made them through under-employment<sup>(12)</sup>.

However, this surprising contrast is not only apparent in the United States and Europe. Startling also is the proportion of jobs and the dynamics of job creation throughout the European Union. As Seghin stresses (*op. cit.*) «if France had been at the same level as Germany in 1992, there would have been 2 million more employed people; if had reached the United Kingdom's level, there would have been 3.1 million more working people; and if it had arrived at the level of the three Scandinavian countries, there would have been 6.15 million more working people.»

Why such a difference? It is not due to the international environment — which is similar in all these countries — nor to technological advances. Indeed, productivity gains were more or less homogenous in all these countries. Nor can it be attributed to the economic growth rate. The most notable difference lies in the fact that labor is taxed more heavily in France than in Scandinavian countries. This does not really involve the amount of mandatory contribution as it does the problem of its breakdown.

### Emploi, unemployment et dispositifs de politique de l'emploi



Source : MES-DARES and INSEE

(11) Employment that receives public aid and/or which is completely or partly exempt from taxes.

(12) Between 1978 and 1994, the average salary in France increased by 20%. On the average, employed persons earn more (of course, this is a statistical average which masks significant disparities) and the proportion of salaried jobs have only gone up by 4%. During the same period, the average salary in the United States (also masking strong differences) only increased by 5%. However, the number of jobs rose by 37%!

According to the OECD, tax revenue in France in 1995 was reported at 44.5% of GDP. This ranked France 4th among the OECD member countries behind Denmark (51.3% of GDP), Sweden (49.7%) and Belgium (46.5%). In France, it is essentially comprised of social contributions based on salaries which, consequently, penalizes employment. In the Scandinavian countries, however, it is principally made up of taxes based on overall revenue. In this way, it plays a more general role of redistribution.

Nonetheless, this cannot mask an even more fundamental problem in France concerning the inequity between and within generations: imbalances regarding employment and revenues (direct and indirect) based on age and socio-professional groups. This gives rise to two problems:

1. first, that of the dynamics of a society marked by significant imbalances and a low working population;
2. second, the power of redistribution of the state and social contribution schemes.

#### Variations encompassing a 10% unemployment rate

Age	Statut	Scénario 1	Scénario 2	Scénario 3
0 to 19 years		2 500 000	2 500 000	2 500 000
20 to 64 years	Occupés	3 500 000	4 000 000	4 500 000
	Non-actifs	2 110 000	1 555 000	1 000 000
	Chômeurs	390 000	445 000	500 000
65 years and over		1 500 000	1 500 000	1 500 000
Overall population		10 000 000	10 000 000	10 000 000

Source : SEGHIN Achille. «Les taux d'occupation en Europe. Le choix des indicateurs pertinents». In Revue Futuribles, n°98, mai 1995.

#### Europe: 1972-1992-1996 Employment Rates Working population (non military) in relation to working-age population

	1972	1982	1992	1996
Germany	67,1	62,4	63,9	64,0
Belgium	59,0	54,1	55,7	56,6
Denmark	73,3	70,6	74,9	74,7
Spain	57,0	46,0	46,7	48,1
France	63,8	60,2	58,5	59,6
Ireland	59,6	55,1	51,1	56,2
Italy	53,3	53,5	54,2	51,3
Norway	66,6	73,0	71,1	76,8
Netherlands	55,7	52,2	63,0	66,0
United Kingdom	68,8	64,6	66,8	71,0
Sweden	73,1	78,5	76,9	72,7

Source : OECD. «Perspectives de l'emploi». Paris : OECD.

## ***Two perspectives for the future : between continuation and breaking-off period***

**Let us address two contrasting perspectives regarding the future of the French society:** the first, regardless of what is said, concerns the continuation of the past; the second evokes the notion of a radical break with the method of organization and the economic and social dynamics.

In general, **the first puts forward the idea that the crisis only reflects the present state of the economy, therefore it is temporary.** A more favorable international environment, the building of the European Union and technological advances will all stimulate the economy, resulting in its recovery and reaching a higher, more lasting level. This would be accompanied by the creation of jobs which would stem unemployment, especially as the working-age population would soon begin declining.

According to advocates of this perspective, by overcoming the primary "plague" of our era, we would easily be able to lengthen the period of active employment in relation to life expectancy and meet the costs associated with the ageing of the population. At the cost of making social sacrifices, of course, recovered growth would enable us to resume social progress. In short, this analysis lies within the scope of the perspective of the come-back of the "Thirty Glorious Years."

**The second** perspective is completely different. Its supporters believe – **I being among them – that we are undergoing a real breaking-off period and that our societies and life styles will no longer have much in common with those of the "Thirty Glorious Years."**

They believe that the present conditions are not favorable to an improved and lasting economic recovery; that growth will not necessarily generate a large number of jobs and that, consequently, unemployment and under-employment will remain high (if not increase even more) at least over the next 5-10 years; and that we will simultaneously continue to encourage actively employed persons to take increasingly early retirements, while the costs for people in their 50s and 60s will increase those of officially retired persons.

By 2000-2005, we will live in an environment laden with earlier-than-expected unemployment, high under-employment and an ageing population in an increasingly global economy subject to the pressures of fierce competition. This will lead to a major rift, and will require radical changes in the economic and social organization as well as in life styles.

Would it be irrational, then, if we turned towards a society based more on the principle of autonomy and partnership, rather than on employment and assistance? A society marked, for instance, by the fact that we would all become "polyactive" from the ages of 17 to 77? Therefore we would simultaneously – at every age and at our own rhythm – continue to carry out activities which are currently artificially distributed according to age.

The future will probably not reflect neither of these perspectives – nor that of the "Thirty Glorious Years", nor that of guaranteed polyactivity throughout a lifetime – which are excessively simplifying. However, according to the perspective we are currently following (whether or not we are conscious of it), the understanding of the present itself and of the appropriate strategies differ fundamentally.

These issues drive the debate well beyond the question regarding the future of retired persons because:

- either power is placed in the hands of elderly persons, who hold most of the assets and will represent the majority of the electorate in the future; they will thus take advantage of this position to swing the pendulum of arbitration in their favor. This will include increasing taxes to the detriment of the working population — or employment — and, in the end, to that of the competitiveness of our economy;
- or power is given to the working population. This would require complete reform, particularly regarding taxation and labor laws. However, in an effort to over-protect a minority of privileged persons it would generate a maximum of exclusions.

Of course, these two hypotheses are taken to the extreme, because the cost involved in meeting the needs of an ageing population could also be equitably distributed between retired persons and the working population: for instance, by reducing the purchasing power of pensions and increasing the contributions that weigh on salaries; or by raising, in priority, that of contributions (CSG – Generalized Social Contribution) based on all revenues, regardless of nature and origin.

The above-mentioned alternative is the one on which scenarios of “the war of ages” are often based, a war which is not inevitable. It is certainly very simplifying in the face of the complex problem that could arise from persistent under-employment and a higher rate of aging during the same period. The former will take one or two decades to solve, and the

latter has come about sooner than expected considering the numerous early retirements affecting the baby boom generations.

## Questioning our social organization

The problem of our entire social organization is, in reality, more subtle than the often troubled scenarios of the “war of the ages.” It is a situation that is simultaneously — and not consecutively — challenged by under-employment and the ageing of the population. The former will take one or two decades to solve, while the latter has come about sooner than expected considering the numerous early retirements affecting the many baby boom generations.

The steady ageing of the population is a deep-seated and irreversible trend. Although it does not constitute a catastrophe in itself, it can, along with the phenomena of under-employment and exclusion, trigger a major explosion. Considering the socio-economic context in France, this appears increasingly inevitable, inasmuch as the French keep sticking to an outdated social organization and refuse to adapt to the radically new geopolitical, economic, technological and social context of the 90s and beyond.

## Viewpoint

Economy: The Weight of Ageing<sup>1</sup>

Jean Peyrelevade

Chairman of the Crédit Lyonnais

**In the course of the last twenty five years the income transfer between the active population and the retired has changed drastically.**

**The income of the retired has increased two and a half times faster than that of the employed, with obvious and major repercussions in terms of social contributions.**

**Jean Peyrelevade states the terms of the equation very clearly.**

**Having rigorously documented past developments and the present situation and reviewed the consequences, he develops possible future scenarios of income distribution.**

**He demonstrates the crucial nature of the problem raised and the social and political difficulties involved in solving it.**

Over the last fifty years there has been an innumerable number of recovery plans for the Social Security system. Every eighteen months, on average, the question of increasing contributions or reducing services is debated with no certainty as to its outcome. The right speaks of freedom, the left of solidarity. The latter proclaims the equality of all beneficiaries and, in order not to modify in any way the generous mechanisms of universal distribution, dreams of unlimited resources. The former thinks in terms of markets and competition as if liberal efficiency were sufficient to exhaust the question, as if social coverage, produced, sold, bought and consumed, were an ordinary commodity. On the one hand, dreams of growth or, lacking that, the rigours of taxation; on the other, depletion management by price and selection by income. On the one hand, distribution exhausted but still sovereign, on the other, capitalisation, with its multiple attractions and still rejected.

While all these fine and noble principles do noisy battle the nation grumbles. Ministers are shaken and governments shattered by the incessant revisions. With every increase in contributions and decrease in the sums paid to the retired or the ill, popularity ratings plummet. To almost every toughening of the health insurance system corresponds a ministerial reshuffle. Protests, demonstrations, grumbling, strikes: both left and right have endured them in turn. Both sides swear in vain that there will be no more reductions and continue to maintain the illusion of an organisational reform that will definitively spare the people this constantly renewed hardship.

(1) This contribution was initially published in «Notes de la Fondation Saint-Simon» in June 1996. We thank the publishers for authorising this reproduction.

The strangest thing is that they continue to breathlessly discuss the solutions to a problem that is never posed, as if there were some kind of masochistic satisfaction to be derived from such discussions. Like demonstrating a theorem without stating the problem. The cost of medication, the number of doctors, health records, hospital fees, adjustment of retirement pensions based on prices rather than on salaries, pensions based on the ten, fifteen or twenty best years, thirty seven and half or forty years of contributions, special regimes, civil servant status, ARCO, AGIRC, independent health insurance, co-management, Parliamentary votes, constitutional reforms. How can the French people make sense of this confused catalogue if no one tells them what it's really all about?

Such is my ambition here: not to propose a new remedy for the problems of the day, but to state the problem for which it is the specialists' job to provide an answer. Leaving aside both the pleasures of technical niceties and the heady perfumes of ideology, I leave it to them to find the solutions. I prefer to simply describe a commonplace but profound, irreversible and ongoing problem which has come to bear, bears and shall continue to bear for decades to come on our country's economy and on the standard of living of each and every one of us. I speak of the increase in human life expectancy which forces us, consciously or unconsciously, to organise an unprecedented transfer of income throughout society as a whole. For a half century (1970-2020) the redistribution of wealth will be completely overthrown. How can anyone believe that a modification on this scale can remain without consequences in terms of our productive activity, lifestyles, social structures and political life? And how can we discuss all

this without making reference to the essential, the age-old development of our demographic situation?

## Life expectancy and rate of activity

The table below, which is based on data supplied by the INSEE, gives a detailed presentation of developments over the last twenty five years with, on the one hand, the active population (including the unemployed) and, on the other, the inactive population aged over sixty (the retired).

The growth rates for the two populations, period by period, are as follows:

We can observe that between 1970 and 1980 the rates are similar, but then diverge with a much faster increase in the overall numbers of the inactive retired population. This is particularly due to the generations born immediately after the Great War leaving the labour market. These generations were particularly numerous due to a steep increase in the birth rate between 1920 and 1930, after the massive blood letting of the first World War. We can see how long-term the demographic memory is, with traces stretching across the full duration of human life i.e. two or three generations. Like a series of immense waves unfolding for thousands of kilometres from one end of the ocean to the other, the crests and troughs of the age pyramid being transmitted identically over six or seven decades before slowly disappearing. During the 80s the retired population increased more rapidly than that of any other socio-occupational category. In 1982 it represented less than 14% of the total population and more than 16% in 1990, i.e. an increase of more than two points in less than ten years. Overall, in the last twenty five years the progression of the inactive retired population

(+ 1,4% per year, on average) doubled that of the active population. In 1970 the inactive retired population represented 38% of the active population (almost three active for every one retired) and 45% in 1995 (two active for every one retired). It increased by seven points in twenty five years.

What does the future hold in store for us? Not only will this considerable trend continue, but it will accelerate. Another major swing linked to the post World War II baby boom will soon have its effect on what remains of our demographic balance. The ageing of the population will increase as of 2005, the retired population increasing dramatically as the generations born with the Liberation reach the age of sixty. All the more so, given the drop in the birth rate as of 1960, the generations leaving active life between 2005 and 2020, born between 1945 and 1960, will register a greater increase in numbers than the new generations born between 1960 and today. The upcoming generation will be smaller than the out-going one.

Another factor also comes into play, but with the same effect. A sort of ground swell runs under, accompanies and amplifies the consequences of fluctuations in the birth rate. Medical progress, the extension of the health system and the adoption of better protected lifestyles are pushing back the end of life and increasing the average duration of our existence. Life expectancy at birth (82 for women and 74 for men) increases by one year every five years. This sustained rate explains the fact that since the fifties, the duration of retirement benefits has very largely doubled. In 1970, life expectancy at the age of sixty was sixteen years for men and twenty one for women. In 2020, according to current estimates, it will reach twenty three and twenty eight years respectively. Life insurance companies are

considering pushing back the age limit on their mortality tables, currently set at 106 years. Some researchers are talking about ages like 130 to 150 years as a biological term for human life. In the fifties the French population over the age of one hundred was numbered in tens. In the middle of the next century there will be hundreds of thousands. Fifty five per cent of the population today aged thirty will live beyond the age of ninety and fifteen per cent beyond the age of one hundred. In 2020, the horizon of our study, the population over the age of sixty will exceed that of the under twenties. Long live the grandfather boom. What are the consequences in numerical terms? The next two tables provide the answer.

From 1995 to 2020 the active population will increase by no more than 3.4% in all, against a 45% increase in the inactive retired population. The active population will register a slight increase between 2000 and 2005, then a similar decrease after 2005. This moderate reduction will continue until 2010, only to increase thereafter. The retired population, on the other hand, will increase by 0.9% per year from 2000 to 2005, and will then be increasing more rapidly. It will continue to expand briskly until 2010 (+ 2.8% per year) and a little less speedily beyond that point (1.5% per year).

Overall, between 1995 and 2020 the active population will expand at one seventh the rate (+ 0.2% per year on average) of the retired population (1.5% per year), and one third its rate (+ 0.5% against + 1.4% per year) over the half century. We can see how the imbalance created in the last twenty five years will be amplified over the next fifty five years. From 45% in 1995 (two active for every one inactive), the proportion of the retired inactive population to the full active population will progress to 63% in 2020, an increase of eighteen points. Between 1970 and

2020 it will have almost doubled (from three active to one and half active for every one inactive).

The graphs show that a break in the trend in 1981, the year when the reduced birth rate of the early sixties began to be reflected in the development of the active population. It was in 1981 that the number of the retired began to increase more rapidly than that of the active population, and in an ongoing manner. It is somewhat ironic to note that by a bitter coincidence it was at this same time, necessity being the mother of invention, that effective interest rates became distinctly positive and in a lasting manner. Thus, whether by a happy chance or as a natural consequence in a democracy with an ageing electorate, a veritable rentier economy seems to have been naturally generated by a growth in their numbers. The conjunction of two events will of course compound their separate economic effects, primarily on the disposable income and standard of living of the active population.

## Income transfer

Let us take stock of the fact that increased life expectancy constitutes a revolution for the human condition. When the first life insurance companies appeared at the end of the eighteenth century, death was a constant companion. There was no retirement to finance when a thirty year old woman was already old and a forty year old man was an old fogey<sup>1</sup>, approaching the statistical end of a normal existence. The man sometimes worried about his wife, his children and how to provide them, to the best of his means, in the event of a mishap. These were the days of death insurance contracts and annuities.

Increased life expectancy was to usher in a new danger, that of surviving, and a new need: that of providing for old age if that state could be reached by all. A self-centred though legitimate preoccupation of the policyholder. Thus the emergence of a new social category – the old – made it essential to have savings transfers in their favour and to accord them a share of the national revenue.

At the end of the nineteenth century insurance in case of life, retirement insurance and the technique of capitalisation became widespread. Financial markets and insurance instruments contributed to maintaining the inactive population, in proportion to the individual wealth of each during their active period.

The appearance in the middle of the next century of the Social Security system and retirement for all made it plain that society, which by a fortunate coincidence had numerous age categories, was determined to apprehend and solve once and for all a problem which now preoccupied society as a whole. Thus it was decided that inequality of wealth should not again make its presence unduly felt through a free market and in the form of individual solutions. The demand for solidarity was easily based on the sustained birth rate.

The name given to the technique implemented, distribution, is psychoanalytically revealing. As if to forget the shortcomings of a very imperfect solution and to convince society that the difficulty had been definitively solved, the very word which should have been used to describe the problem was applied to the solution. The collective approach set out to resolve what was

1. Gérard Meneroud, *Du risque de décès au risque de survie*, La Jaune et la Rouge, December 1995.



indeed an enormous problem, that of the overall distribution of the national income between the active and inactive population.

There is no question of considering increased longevity, the result of progress, as collective impoverishment. All human societies have always had the eternal and metaphysical ambition of pushing back death. The financial consequences of this accomplishment must however be accepted.

In this respect distribution and capitalisation are merely two technical modes of the same transfer of income between the active and inactive populations. The second, which for the active population consists of saving with a view to future maintenance, is particularly suitable when a dynamic demographic situation temporarily swells the numbers of productive workers. Society thus avoids having to bring to bear at a later date, in the form of compulsory distribution, the growing cost of a larger number of retired on a reduced active population. Capitalisation is therefore very effective when the active population is provisionally at its maximum since this technique, in a manner of speaking, smoothes out the wrinkles. Given our demographic profile, a wiser approach would have recommended its implementation between 1970 and 2005, in order to exploit the increased birth rate after the last war. Missed opportunities cannot be called back: twenty five years have gone by in a sort of strange blindness, and it may well now be too late. The remedy, when administered at an inopportune moment (if it ever is), will have lost a lot of its force. We will have, without any previous savings, to transfer and distribute more and more of our income.

Let us estimate, firstly in terms of the

past, the amplitude of the task. The income data is presented in constant French francs, deflated by the consumer price index and expressed in the 1995 base.

For the period 1970-1995, the real average growth rate of the GNP and disposable household incomes are very close, at 2.6% per year. But the distribution of this income between the active and the inactive retired population is radically modified in favour of the latter (graph 4). Over the twenty five years considered, the overall income of the active population progressed by 1.9% per year on average, that of the inactive retired population by 5%. Their income, which represented 18% of the disposable household income in 1970 (and 22% of that of the active population) rose to 32% in 1995 (and 47% of that of the active population): the percentages practically doubled.

This development is not due solely to the increase in the retired population which, as we have seen, went from 38 to 45% of the active population over the same time period. Over the period, per capita income progressed by 1.2% per year on average for the active population and by 3.6% for the inactive retired population i.e. three times faster. The increase in active per capita income was thus one point lower than the real GNP increase per employed member of the active population i.e. 2.3% (apparent productivity of work), whereas the per capita increase for members of the inactive retired population was greater by more than one point. Distribution of productivity gains over the last 25 years has thus been in favour of the inactive retired population, at the expense of the active population. If we refer only to the last fifteen years, when the real increase

dropped considerably, the average yearly income increases per capita are 0.5% for the active population and 2.2% for the inactive retired population, more than four times greater. The «preference for the inactive population» has thus been reinforced in relative value. The per capita income for the inactive retired population, which was distinctly lower than that of the active population in 1970, representing only 58%, progressively caught up with it. In 1993 per capita incomes were equal to FRF 137 800, in 1995 French francs. Then the per capita income of the inactive retired population began to outstrip that of the active population.

Over twenty five years and compared to the overall active population, there is a shift of seven points in terms of population (38 to 45%) and twenty five points in terms of income (22 to 47%). These figures cannot, fundamentally speaking, be compared with any others. Unemployment is said to be the principal problem of the French economy and this is no doubt true when we think of the waste it represents, the unused production capacity that is only asking to be used, and the suffering arising from it. But, in terms of income distribution, it is far from true. Transfers in favour of the unemployed are a joke compared to those enjoyed over the last twenty five years by the inactive retired population. Today job seekers represent 11.5% of the active population (an increase of about 10 points over the 1970-1995 period), but their overall income amounts to only 3.1% of that of the active population. In 1995, unemployment benefits came to a little more than FRF 100 billion for 2.3 million receiving aid : the average income of an unemployed

person receiving aid is therefore FRF 46 000, i.e. less than one third of that of an inactive retired person. In 1970, the same average income for an unemployed person receiving aid, calculated in a similar manner, was about FRF 30 000 (in 1995 French francs), about half that of an inactive retired person at the time. The two types of inactivity are therefore treated in very different manners, so much so that we begin to wonder about the equity of such different treatment which is increasing steadily.

What were the vectors of a development so long in favour of those who no longer work because of their age (and not because of the economic situation)? The distribution of the national income, which constantly privileges the inactive retired population, derives more from the development of their per capita income than from their demographic profile. The political powers, of whatever colour, have never ceased to give their attention to a social category that is more and more numerous, reputed to be legitimist and whose vote is often decisive. In 1995, in terms of old age pension alone, retired households received the equivalent of almost 13% of the GDP. By comparison, the total of family welfare benefits and employment expenses (including unemployment benefits) at the same time represents only a little more than 5% of the GDP.

Since images have a long life, the representation of old age as necessarily poor, indeed miserable, has continued far longer than the statistical reality would warrant. It is nevertheless true that pension adjustment over two decades has been, an admirable situation, faster than that of salaries and therefore much greater

again than that of prices. Pensioners, the principal beneficiaries of weighted indirect incomes, particularly health insurance benefits (7% of the GDP), received nearly 18% of the GDP in 1995 in terms of social coverage, and further enjoy the benefits of reduced social security contributions compared to those paid by wage earners. It was considered good form to free older households, supposed to be economically weak, from the majority of solidarity payments, and from which they benefit generously: contributing and receiving are not the same thing. Finally, since the accumulation of wealth is naturally greater in the second half of active life, pensioners have relatively high capital incomes, further increased by the fact that the fight against inflation made the practice of highly positive real interest rates world-wide.

According to INSEE data for 1992, wealth increases considerably with age, reaching a maximum of FRF 1.1 million per household between the ages of 50 and 75, before diminishing thereafter, depending on voluntary transfers to the following generation and the partial realisation of assets in order to complement retirement resources.

The fact that real interest rates became highly positive at the beginning of the eighties increases the amplitude and consequences of the phenomenon of accumulation. From 1970 to 1980, the share of the wealth income in household incomes remained stable, at about 12% (10% for the active population and double that, 20% for the inactive retired population). The figure has risen regularly since that date to reach 18% of disposable income in 1995 (respectively 14 and 31%, which shows that, wealth

incomes aside, the per capita income of the inactive population was still lower than that of the active population in 1995). As a projection, we can expect that in 2020 wealth income will represent 22% of the average per capita income of the overall population, 17% of that of the active population and 37% of that of the inactive retired population. It is easy to see the consequences of an economy that favours capital income and the difficulty of finding corrective measures not limited solely to a secondary redistribution of labour income.

Of course we can't continue like that, unless we want to give a sort of posthumous victory to poor Malthus: one social category which is inactive because of its age, and with constantly growing electoral importance, with increasing decision power, controls a growing share of the national income. The share controlled by the active population diminishes accordingly. All we have to do is add on an hypothesis, which is quite solid if we have sufficient belief in past econometric adjustments to project the conclusions into the future: the fertility rate of the active population varies in direct proportion to the share of the national income they control. This model, with its somewhat mechanistic charm, then forms a perfect circle, converging toward an ineluctable solution: a smaller slice of the social pie, fewer children; fewer children, a smaller active population and a proportionately larger inactive population; a larger inactive population, a larger share of the national income devoted to their upkeep and a smaller share to that of the active population, and so on and so on. In two hundred years' time the last Frenchman will die and, having no children, will take what remains of the

problem with him to the grave. Is this not the description of a purely decadent mechanism?

In order to avoid such an unpleasant eventuality it is essential to change the present system of distribution and modify the terms of the social contract between the active and retired populations. This is no easy task.

## Distribution tomorrow

Three different scenarios have been calculated in order to assess the stakes involved. We adopted the conventional and relatively favourable hypothesis, based on the predictable results for 1995, 1996 and 1997, that between 1995 and 2020, disposable household income will increase by 2% per year in constant French francs i.e. at approximately the same rate as long term economic growth. A corresponds to the income of the active population, B to that of the inactive retired population, R is the overall disposable income ( $R = A + B$ ), x is the total active population and y the total inactive retired population.

### **Scenario 1: consolidation of the rules presently governing distribution**

The first scenario consists of continuing the past trend for overall income. More precisely, we suppose that in the future the average growth rate of the overall B income of the inactive retired population will have the same amplified relation with the overall income R as in the last fifteen years, i.e. 200%, which fixes it at 4% per year. Consequently, the average growth rate for the overall income of the active population, A, would then be

1.1% i.e. 55% of that of the same available income R. In other words, we consolidate the rules governing the social distribution in operation for the last fifteen years.

What are the consequences? Given the demographic factor (population growth of 1.5% in one case and 0.2% in the other),  $A/x$  increases by 0.9% per year as of 1995 and continues to do so until 2020. At the same time,  $B/y$  increases by 2.5% per year for the same period i.e. almost three times faster. In 2020 the per capita income for the inactive retired population will amount to FRF 265 000 (1995 French francs), and that of the active population will be about FRF 172 000. The continuation of the past trends leads to the per capita income of the inactive retired population being 58% greater than that of the active population in 2020. This is unbearable and must therefore be corrected, which cannot be done without creating multiple tensions.

As soon as unfavourable developments for the active population come into play, both in terms of per capita income and in terms of their numbers, the distribution of the national income continues to be deformed to their detriment. Overall, two thirds of the annual increase in national wealth would have to be redistributed each year solely in favour of the inactive retired population. Their share of the overall disposable income would thus go from 32% in 1995 to 49% in 2020, i.e. nearly 100% that of the active population. At the present rate of progress, in twenty five years' time they will have a share of the national income that is practically equal to that of the active population. Which amounts to saying that the average deduction on gross primary household incomes will be, solely for the

upkeep of the retired population, very close to 50% at the end of the period. Over and above that, defence, education and other works of public interest will have to be financed. We get an idea of the degree to which the currently fashionable ideas about reducing compulsory deductions are purely fantastical, if not downright misleading.

### **Scenario 2: Identical progression of per capita incomes for active and inactive populations**

I am perfectly willing to describe the second scenario as reasonable. There is no justification for the absurd situation whereby the per capita income of the inactive retired population is considerably superior to that of the active population, unless we are going to make it an article of faith that parents, whatever their age, should always be better off than their children. It is hardly likely that such an article would have a propitious effect on economic development and social harmony. Let us therefore suppose that the political powers come to their senses, become more realistic, and decide that development of per capita income should in the future be identical for all. The second scenario is therefore one of consolidation, not of past trends, but of the situation with regard to relative per capita income frozen at the end of 1995.

Growth of per capita income, whether for the active or inactive population, is therefore commanded by demographic considerations: 1.4% per year on average for the period (2% in overall income, less 0.6% population increase). Distribution of available income no longer depends on the numerical development of the two populations

under study, which enables us to appreciate the influence of the demographic deformation. Its influence is of considerable consequence for, if the individual per capita incomes are designed to be very similar in 2020 (FRF 198 000 for the active population, FRF 205 000 for the inactive), the overall income of the first group increases by 1.6% against 2.7% for the second group. The two point annual growth rate is thus distributed half and half between the active and inactive retired populations. The share of the latter group in disposable household income progresses from 32% in 1995 to 40% in 2020 (45 to 66% of the income of the active population). Compulsory deductions continue to increase very greatly.

### **Scenario 3: Stabilisation of the overall relative share of the active and inactive populations**

Let us now suppose that an enlightened despot, free from all electoral considerations and indifferent to popularity but conscious of the danger of putting a damper on productive energy, decides to put an end to this drift and to stabilise for the future the distribution of the national income and the overall relative share of the active and inactive populations in the fruit of growth. These fruits are then distributed per definition in the same proportions as those obtained in 1995: 32% on the one hand and 68% on the other, then compulsory deductions will cease to increase (all other things being equal), since there would no longer be supplementary transfers from one social category to the other. It should be observed that this hypothesis is antisymmetric to

that of the first scenario since, of the two point annual growth, 1.4% i.e. 70% goes each year to the active population and 0.6% i.e. 30% to the inactive.

With distribution of the national income thus frozen at its 1995 level, per capita incomes develop in inverse proportion to demographic development: 1.8% per year on average for the active and 0.5% for the inactive retired population. The per capita income of the active population catches up with that of the inactive retired population in 2005, then outstrips it and reaches a distinctly higher level at the end of the period (FRF 217 000 against FRF 160 000). In order to stabilise distribution of the national income it would be necessary, given demographic development, to reverse past trends in relation to per capita income. The inactive retired population would be prejudiced, with a low increase in buying power (or even a reduction, between 2005 and 2010, when the large generation born after the Liberation retires), whereas the active population would have significant increases in buying power, distinctly superior to that of the 1980-1995 period.

### **Reversing past trends in order to stabilise distribution of the national income**

A few words to conclude: Demographic development and the advantages accorded to the retired population over twenty years have made distribution of the national income between the active and inactive populations a topic of major importance for the French economy. To continue past trends would be equiva-

lent to making the young generations pay a grossly exaggerated bill. It would compromise growth and development by crushing the productive sphere under the weight of deductions. It was wrong to foster the illusion by speaking of reducing deductions while pushing forward a Social Security debt which will have to be paid by the active population of the year 2000, a population already doubly under pressure. It will be politically very difficult to bring relative income levels into proportion: the active population of today is the inactive population of tomorrow and in relation to this question we all defend contradictory interests. A change of direction will no doubt involve some deep shocks. Will it be necessary to push back retirement age several years or introduce strict control of pension levels? Is democracy capable of such severe adjustments in all lucidity, without the pernicious comfort of a return to inflation, a painless instrument for redistributing incomes and wealth? One thing is sure: no governmental discourse on growth, the fight against unemployment, reforms to the Social Security system and retirement schemes, fiscal reform, reforms to the health system; none of this will be credible if it does not explicitly address this now inevitable problem.

# The future for old people in Ile-de-France: between growth and uncertainty

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**T**he future extent of the ageing phenomenon is less certain than is often imagined.

**First of all from the quantitative standpoint : in 1994 INSEE forecast that by the year 2020 the number of over-65s in France would be some 3.5 million more than had been predicted in 1979 for that year.**

**The announcement that the over-60 population will double by the year 2050 pertains to one possible development, but it is not the only one, especially as migration introduces an additional factor of uncertainty in Ile-de-France.**

**Secondly, from the qualitative standpoint, the predicted quadrupling of the number of people in the population aged over 85 could be accompanied by a much more moderate increase in the number of people likely to have to cope with severe handicaps.**

The ageing of the population of Ile-de-France is conventionally accepted as reflecting an increase in the proportion of old people, and as something to be expected as part of national ageing: same causes, same effects, and the same timetable. The post-war "baby boom" generations are now helping to increase the median age of the working population and, after 2005, will swell the numbers of those in retirement. However ageing in the region will nevertheless be less marked than in France as a whole, since migratory flows between Ile-de-France and the provinces and other countries contribute to lowering the age of its population.

The predicted increase in the numbers of people aged over 60 will have undeniable effects as regards retirement and pensions<sup>1</sup>. In terms of health on the other hand, the effects are less clear. Age in itself is not a criterion of the state of health. It is true that health costs increase with age beyond 60, but they are strongly concentrated in the last years of life. Of course as people are living longer, these "final years" are coming later and later. For example, in order to measure the extent of needs for facilities related to old age, the demographic approach to ageing must consider an "old age" that varies in time, and concentrate on the final years of life.

(1) See above: "The Phenomenon of Ageing", D. Blanchet.

(2) See above: "The Old Age Limit", A. and A. Mizrahi.

## The conventional approach: the number of over-60s will double by the year 2050.

In demographic terms, the "ageing" of a population reflects the increased numbers of old people in the population. The usual evaluation involves calculating the proportion of over-60s in the population as a whole.

In an attempt to put regional ageing in the national context, a number of possible trends have been considered. This presentation puts special emphasis on the particular regional scenario that appears most coherent with the hypotheses adopted for France as a whole in the "central scenario" of the National institute for statistics and economic research (INSEE)<sup>3</sup>, which extends up to the middle of the next century.

## The post-2005 old people "boom"

The number of over-60s is expected to double between 1995 and 2050, from 1.67 million to 3.3 million people. As in France as a whole, the rise will be moderate until 2005 (of the order of + 12,000 a year), and will then speed up between 2005 and 2035 as the baby boom generations arrive (to around + 40,000 a year). Subsequently, the arrival of the less numerous generations born after 1975 will slow down this rate of increase by half.

Only a halt in the progress made in staving off death could significantly limit this increase, which will be of the order of 20% by 2015 and 40% by 2050.

Whatever set of assumptions is adopted, it is in the older age groups that numbers will increase the quickest: the over-75s are expected to triple and the over-85s to quadruple.

The proportion of over-60s should remain stable up to 2005 (at 15.2% of the regional population in 1995, and 15.5% by 2005), then increase by about 18% to 2015, and by 23% by 2050<sup>4</sup>. The median age of the Ile-de-France population, which was 33.9 years in 1995, is expected to approach 36.5 in 2015, and 39 in 2050, unless there are changes in fertility, death rate and migration that differ significantly from current trends.

## Ageing less marked than in France as a whole

The proportion of the French population aged over 60 and living in Ile-de-France is expected to remain stable at about 14.3% throughout the period of projection. However, according to all the evidence, ageing will be less marked in the Ile-de-France than in France as a whole.

According to the central scenario, the median age of the population in the region should go up by 2.6 years over the fifteen years between 1995 and 2010 (+ 4 years in France as a whole), with the increase subsequently slowing down (+ 2.3 against + 6.2 years in France between 2010 and 2050).

The same applies to the change in the number of over-60s: the expected increase in Ile-de-France is 8.1 points (from 15.5% in 2005 to 23.6% in 2050) compared with 12.9 points in France as a whole (from 20.8% to 33.7%).

After 2005, population growth in France results only from the increase in the numbers of over 60s, with the proportions of other age groups, notably the youngest, showing a decline.

In Ile de France on the other hand, all age groups contribute to the increase in population. Only the rising numbers of the over-60s leads to the ageing of the regional population as a whole. This lower regional ageing is related to the «rejuvenating» effect of the migratory exchanges between Ile-de-France and the provinces and other countries.

## The «rejuvenating» effect of migrations

Between 1975 and 1990, had there been no migration, the average age of the population of Ile-de-France would have gone up by 3.1 years and the number of over-60s by 428,000. The changes actually observed were extremely different: the average age went up by 0.7 years and the number of over-60s by only 29,000<sup>5</sup>.

Population exchanges with the provinces and with other countries are helping rejuvenate the Ile-de-France. Many young people come there: it is a necessary stopover point for young civil servants, but Ile-de-France is also a centre of attraction owing to its higher education facilities and, particularly, the size of its labour market. Many of these young people subsequently return to the provinces. For people aged over 30, the numbers

(3) See above «the central regional scenario» page 108

(4) The average age of 36.7 years in 1995 will probably approach 41 by 2050.

(5) Jacquot A.: «Migration and Uneven Ageing in French Regions» - Economie et Statistique No. 273, INSEE, 1994.

leaving the Ile-de-France — usually families with or without children, and retired people — exceed the numbers coming in. The departures help reduce the proportions of the older and younger members of the workforce. Also the Ile-de-France is a particular entry point for immigrant populations, mostly young, who contribute, like those in the provinces, to the high birth rate in Ile-de-France. The region accepts nearly half those checked by the Immigration Department.

These effects will continue in the future, but to a less marked extent. The expansion of university structures in the provinces should continue to slow down the number of students moving to the Ile-de-France region. With regard to the growth of housing accommodation in Ile-de-France, and of seasonal mobility and second homes, these should reduce the numbers of retired people moving to the provinces especially as, with the passage of time, fewer and fewer will be natives of the provinces and more and more will have attachments in Ile-de-France. According to the central scenario, between 1995 and 2050 the number of over-60s in Ile-de-France will increase by 1.6 million people, and the average age of those living in the region will go up by 5 years. If there were no migration, these increases would be 2.6 million and about 11.5 years respectively.

Of course this type of calculation is still highly theoretical: even if one could envisage the inward flow of people to Ile-de-France coming to a halt, it is difficult to imagine those who had already arrived having no reason to leave.

Immigration from abroad and internal

migration play an equal part in «rejuvenating» the Ile-de-France population. Exchanges with the provinces primarily limit the increase in the number of older people in the region. They also make a partial contribution to the rise in the numbers of young adults and, indirectly, of children. Exchanges with other countries and the French overseas territories rejuvenate the lower part of the age pyramid (the under-60s) with regular net contributions of population.

## The sources of uncertainty

The changing numbers of older people in Ile-de-France are sensitive to three factors:

- The extent of progress in delaying death,
- Migration between Ile-de-France and the provinces, involving people of working age and their families, students, and retired people,
- Migration involving other countries.

The uncertainty in each of these factors is evaluated with reference to the central regional scenario. It is the more marked the longer the period considered.

The increase in the number of over-60s could be appreciably higher - of the order of 15% by 2015 and 20% by 2050 - if the number of departures by retired people were to drop by 30% by 2015 (rather than 10%) as a result, for example, of a massive increase in second homes or seasonal instead of definitive migration.

By the year 2050, similar effects would be produced by a doubling of the net exchange with other countries (+ 60,000 a year instead of + 30,000) or a further extension of 4 years in life expectancy (+ 12 years instead of + 8 years).

Conversely, changes in the number of over-60s could be appreciably lower, if the death rate remained stable (20% by 2015 and 40% by 2050). Uncertainties related to other factors are low by the year 2015. If by the year 2050 the net migration with other countries were zero, the increase would be reduced by about 20%, a comparable effect to reducing the increase in life expectancy by half.

As has happened in the past, current predictions could be overturned, notably by an even faster reduction in the death rate in France. Successive sets of data from INSEE over 15-year periods show just how quickly such changes take place. Thus in 1979 INSEE was expecting that the number of over-60s in France by 2020 would be 9.6 million. Six years later, in 1985, after revising the death rate assumptions, this prediction lay between 11.6 and 12.7 million according to two different scenarios for rates of change in life expectancy. In 1994 the central scenario, which assumed that rapid increases in life expectancy would continue (by + 1 year every 4 years), predicted this number to be 13.1 million, again for the year 2010, or 3.5 million more than the figure predicted in 1979!

On the other hand the decline in the overall death rate over the coming years, resulting from opposing trends, could be equally surprising in its slowness. Future advances in delaying death will depend largely on the frequency of cancers — and particularly in how people react to the risk factors (alcohol, tobacco, food hygiene, and so on) — and the effectiveness of their treatment<sup>(6)</sup>.

(6) Nizard A.: «The Three Revolutions in Death Rate since 1950» - Population et Société No. 327, Unpublished, Sept. 1997.

## The central regional scenario

In an attempt to put ageing in Ile-de-France into the national context, an initial step was to construct a regional scenario that was coherent with the central scenario used by INSEE<sup>1</sup>.

This "central" regional scenario makes the following assumptions:

- A reproduction rate of 1.8 children per woman, or slightly above the current level,
- A reduction in death rate normalised to that of France as a whole (an increase of 5 years in life expectancy between 1990 and 2020, and of 4 years between 2020 and 2050) while maintaining regional characteristics.

Life expectancy for those living in Ile-de-France (80.9 years in 1990) does not differ from the national average (80.8 years); however the Ile-de-France population lives slightly longer (73.2 years compared with 72.6 years). The specific regional features are related to the following:

- in men, a lower death rate at all ages, except under 10 and particularly between 25 and 40 (AIDS) where the risk of dying is higher (+ 10%),
- in women, a slightly lower death rate at advanced age (70 and over) which compensates for an increased death rate between the ages of 20 and 40 (by about 10%) and between 55 and 70 (about 3%) linked to a higher incidence of respiratory diseases.
- A level of migration with the provinces of people aged under 55 (those of working age and their family) at the average level observed between 1975 and 1990, when there were alternating periods of job creation and job losses,
- Fewer departures upon retirement<sup>2</sup>: retired people in Ile-de-France are three times more mobile than those in the provinces. Departures went up sharply until the middle of the 1970s. Since then these departures have fallen. In the conditions of death rate and mobility of the period 1975-1982, apparently 21.8% of Ile-de-France people aged 60 left the Ile-de-France during their retirement. In the conditions of death rate and mobility of the period 1982-1990, apparently 19.7% of them did the same. This downward trend has been cut by half and continued up to 2015. In this situation, the frequency of departures falls by a little over 10%.

- A net migratory flow with foreign countries and French overseas territories of + 30,000 people a year, or 60% of the net figure used at national level (ratio observed since 1975).

The sensitivity of the results to each of the following hypotheses was evaluated with reference to the "central" scenario with only the hypothesis tested being modified:

- Reproduction rate reaching 1.5 children per woman in 2010,
- Reproduction rate reaching 2.1 children per woman in 2010,
- The intensity of migration to the provinces in the period 1975-1982 was marked by an unfavourable economic situation: over the 8 years, the number of jobs in France went up by 58,000 a year on the average and by 7,000 in Ile-de-France; the balance of migratory flows between Ile-de-France and the provinces was a deficit of 63,000 a year.
- The intensity of the migratory flows to the provinces in the period 1982-1990 was marked by the economic recovery of the late 1980s: employment went up by 79,000 a year in France and 37,000 in Ile-de-France; each year the migratory deficit from the region to the provinces fell to 38,000 people.
- Departures by retired people remained numerous and stabilised at the level reached in the 1980s. It is assumed that the factors encouraging departure will retain their effects: moving into one's second home or into a family home; lengthening of life expectancy, allowing an increasing number of couples to grow old together (couples are more mobile) and so on,
- Departures by retired people fell sharply as a result of more people having two homes and/or preference for seasonal migration rather than definitive migration. The number of departures stabilises after 2015 at the level of the 1950s (30% down on the period 1982-1990),
- Net migration with foreign countries is zero. The question here is to examine the effect of foreign migration on the ageing of the population,
- The death rate remains at the level reached in 1994.

(1) Quang-Chi Dinh : Projection de population totale pour la France métropolitaine. Base RP90. Horizons 1990-2050. Insee Résultats, Démographie-Société N°44, Insee, 1995.

(2) Louchart P. : Des départs de retraités vers la province un peu moins fréquents. Note Rapide Population-Modes de vie N° 14, Iaurif, janv 1996.



## The probability of results of various hypotheses

### By 2015

	Effectif des 60 ans et + (en milliers)			Part des 60 ans et +			âge médian de la population		
	effectif 2015	évolution 1995/2015	écart au sc central	% en 2015	évolution 1995/2015	écart au sc central	2015	évolution 1995/2015	écart au sc central
<b>Central scenario</b>	<b>2 210</b>	<b>540</b>	<b>0</b>	<b>18,2</b>	<b>3,0</b>	<b>0</b>	<b>36,6</b>	<b>2,7</b>	<b>0</b>
variation*									
migrations of persons under 55 level 82-90	2 220	550	10	17,8	2,6	-0,4	36,3	2,4	-0,3
migrations of persons under 55 level 75-82	2 200	530	-10	18,7	3,5	0,5	37	3,1	0,4
low level of departures of retired persons (54-62)	2 290	620	80	18,7	3,5	0,5	36,9	3	0,3
high level of departures of retired persons (86-90)	2 170	500	-40	18	2,8	-0,2	36,5	2,6	-0,1
birth rate of 1.5 children per woman	2 210	540	0	18,8	3,6	0,6	37,8	3,9	1,2
birth rate of 2.1 children per woman	2 210	540	0	17,7	2,5	-0,5	35,7	1,8	-0,9
external balance nil	2 210	540	0	19,5	4,3	1,3	38,1	4,2	1,5
steady birth rate (1994)	2 100	430	-110	17,5	2,3	-0,7	36,2	2,3	-0,4

### By 2050

	Effectif des 60 ans et + (en milliers)			Part des 60 ans et +			âge médian de la population		
	effectif 2050	évolution 1995/2050	écart au sc central	% en 2050	évolution 1995/2050	écart au sc central	2050	évolution 1995/2050	écart au sc central
<b>Central scenario</b>	<b>3 260</b>	<b>1 600</b>	<b>0</b>	<b>23,6</b>	<b>8,4</b>	<b>0</b>	<b>38,8</b>	<b>4,9</b>	<b>0</b>
variation*									
migrations of persons under 55 level 82-90	3 420	1 760	160	22,9	7,7	-0,7	38,4	4,5	-0,4
migrations of persons under 55 level 75-82	3 100	1 440	-160	24,4	9,2	0,8	39,3	5,4	0,5
low level of departures of retired persons (54-62)	3 550	1 890	290	25,1	9,9	1,5	39,7	5,8	0,9
high level of departures of retired persons (86-90)	3 140	1 480	-120	22,9	7,7	-0,7	38,4	4,5	-0,4
birth rate of 1.5 children per woman	3 260	1 600	-	26,9	11,7	3,3	42,6	8,7	3,8
birth rate of 2.1 children per woman	3 260	1 600	-	21	5,8	-2,6	35,9	2	-2,9
external balance nil	2 980	1 320	-280	26,6	11,4	3	41,3	7,4	2,5
steady birth rate (1994)	2 580	920	-680	19,9	4,7	-3,7	36,9	3	-1,9

The extent of the ageing of the population, as measured by the relative proportion of old people, is more uncertain. In fact the uncertainties about future fertility and trends specific to the different age groups can be additive. For example, the proportion of the Ile-de-France population aged over 60 could go up from 15.2% in 1995 to nearly 24% in 2050 in the reference scenario, but approach 27% if the reproduction rate were to fall to 1.5 children per woman or if the net migratory exchanges with other countries were to become zero.

### **The final years of life: a moderate increase in the numbers of the elderly**

There is no doubt that many more people living in Ile-de-France will pass the age of 60, but also many more of them will do so in good health.

#### ***The boom in the numbers of retired people in good health ...***

In France<sup>7</sup>, the improvements in life expectancy have hitherto been accompanied by increases in the expectancy of life without disability. The expectation of life with a disability in women aged 65 even fell in France by half a year during the 1980s. In 1991, the life expectancy of severely disabled French people aged 65 was 2 years for women and 0.9 years for men.

Naturally, it is the final years of life that are liable to generate enhanced needs for health care. As people live longer, these final years are occurring increasingly late. One therefore has to

take into account an «old age» that varies with time<sup>8</sup>. On the average, people begin to lose their full faculties during the last 5 or 10 years of life.

In order to estimate the population that runs the greatest risk of suffering from fairly severe handicaps, the numbers of people living in Ile-de-France having 5 or even 10 years of life expectancy at the most were calculated for the period 1975 to 2050. The age at which life expectancy falls below 5 years for example was 85 in 1975 and 87 in 1990. Using the death rate figures adopted, it will reach 89 in 2015 and 91 in 2030.

#### ***Moderate growth in the numbers of old people***

In 1990, as in 1975, about 85,000 people living in Ile-de-France had exceeded the age at which the average expectation of life fell below 5 years. This number should increase slightly by 2010 (92,000) and more significantly later on (220,000 by 2050).

This increase (+ 135,000) will be ascribable mostly to the post-war "baby boom" (+ 100,000) and only partly to the fact that people are living longer (+ 35,000).

This trend is not commensurate with the expected increase in the number of people over 60 (+ 1.6 million) and particularly with those over 85 (+ 420,000). In 1975, the numbers of people over 85 and those who on the average had 5 years to live were the same. Since then, the trends in these two populations have diverged.

This population, which in 1995 accounted for 0.9% of those living in Ile-de-France, will apparently not exceed 1% until after 2030 and could reach about 1.5% in 2050.

If the analysis is extended to the last ten years of life, the increase in numbers predictable between 1995 and 2050 is of the order of 400,000, the rise essentially taking place after 2025. This increase too is not commensurate with the rise in the number of people aged over 75 (+ 1 million).

These differences clearly show the dangers of making too simplistic use of the results of demographic simulations for "old" people, when in fact age is less important than life expectancy, as frequently happens in terms of health.

(7) Research by J. M. Robine and A. Colvez.

(8) See above: "The Old Age Limit", A. and A. Mizrahi.

# An overview of the ageing population in Ile-de-France

**Philippe Louchart**  
Démographe  
IAURIF

**T**he proportion of persons over sixty varies significantly in relation to time and space. How to explain the dissimilarities observed between the communities of Ile-de-France? How do they change and develop? What are the causes? Why do some communities age more quickly than others?

As in other areas, the ageing of the population in Ile-de-France varies significantly from one community to another. To take one example, in 1990 the proportion of Ile-de-France residents over 60 ranged between 2% in Lognes and 54% in Vaux-sur-Lunain. Both of these “extreme” communities are in the same department – Seine-et-Marne – which is also the “youngest” in France.

In addition to these geographic disparities, there may also be considerable temporal developments in a community. For instance, let us consider the extraordinary example of the city of Magnanville, in the Yvelines. In 1962, Magnanville had the «oldest» population in Ile-de-France: 64% of its residents were over 60. However, nearly thirty years later – 1990 – this proportion dropped to a mere 10%.

In comparison, national and regional rises and falls are insignificant. In France, this very proportion increased by barely two percentage points between 1962 - 1990 (from 18% to 20%), whereas in Ile-de-France, it fell by one percentage point (from 17% to 16%).

Such dissimilarities and such developments as these in communities give rise to a number of questions. Are there any specific, objective reasons for the disparities observed in 1990? If so, what are they? How do they come about and, above all, why?

A detailed analysis of the geography and history of the ageing of populations in Ile-de-France sheds some light on these questions; an analysis that is backed by the econometric analyses.

## A geographic outline of ageing in Ile-de-France

In order to better outline the geographic disparities of aging in Ile-de-France, the results of the last census (1990) were compared to those of the four preceding ones (1962, 1968, 1975, 1982). Consequently, more or less unchanging situations on a local level were identified.

The 1,300 communities of Ile-de-France were broken down into four principal groups. The first three represent the “greying communities.” At a certain point between 1962 and 1990, at least 20% of the inhabitants of these communities were 60 and over (even if this was no longer the case in 1990). The fourth group was comprised of communities in Ile-de-France that never reached this 20% “threshold” (which in fact does not exist) within this period. It simply corresponds to the national average in 1990.

Another threshold – the 60-year mark – is used for the quantitative analysis of aging, and is just as arbitrary as the 20% “threshold.” It by no means signifies that old age begins at 60. Nor does it imply that a 60-year-old person in 1962 can be compared to a 60-year-old in 1990 (with regard to personal ageing). This is a completely different debate[1].

(1) For a better understanding of the graphs, only the 347 communities with 5,000 or more inhabitants in 1990 are represented. In the econometric analyses, a 500-inhabitant threshold was established in 1990. Declines are measured according to community populations. This prevents too much weight being given to small communities, which are numerous in Ile-de-France but count a small number of residents in the region.

## “Greying communities” over the last 30 years and earlier

Structurally speaking, these communities (146 out of 1,300) are comprised of a rather elderly population. Over the last thirty years (1962-1990), at least 20% of their population was made up of persons 60 and over. Most are small rural communities which have not suffered the effects of “periurbanization”; where farmers are still a significant part of the active workforce.

Within this group, only fifteen “greying” communities had a population of 10,000 or more in 1990. During this period, the population decreased in nearly all of them, and there were few construction projects (between 1% and 17% of housing was constructed after 1975). Housing developments are quite old and also relatively diverse. A greater number of studios and 1-bedroom flats are found in these communities (they represent between 1/3 and 2/3 of housing), as well as rentals. Communities such as these are practically all considered “well-to-do” and have high property values. They include:

- eleven out of twenty districts in Paris (the more or less “greying” districts: 16th, 7th, 6th, 8th, 12th, 17th, 15th, 4th, 1st, 9th, 14th and 5th);
- four communities on the outskirts of Paris (Neuilly-sur-Seine and Levallois-Perret on the west side, Saint-Mandé and Vincennes on the east side);
- and three other “isolated” communities (Enghien-les-Bains, Bois-Colombes and Le Perreux-sur-Marne).

The analysis of this group already suggests four factors to which are attributed the pronounced ageing of the population in certain communities in the Ile-de-France region. Though they are all associated with the nature and structure of housing, their specific role within Ile-de-France’s 1,300 communities must still be verified. The factors in question (and the variables used for statistical analyses) include:

1. the magnitude of the earlier housing (average age of housing in the community);
2. the charm/pleasantness of the community of residence (proportion of second homes);
3. property values (the number of high-level executives and intellectual professions among the community’s working population);
4. small-sized housing units (average size of housing in the community).

The graphs below show the correlations between each of the variables and the proportion of persons 60 and over in the communities of Ile-de-France<sup>1</sup>. All of the correlations are in line with the forecasts. Furthermore, they confirm the role that housing and its characteristics play in the ageing differential of populations in the communities of Ile-de-France.

The clearest relationship observed is the one between the “age” of housing and that of the population.

Moreover, the econometric analysis shows that each of these variables play a separate role [see infra].

The study of “greying communities” considered as such for less than 30 years gives us a more in-depth understanding of the factors behind the ageing of a local population.

## "Greying communities" considered as such for less than 30 years

In 1990, at least 20% of these communities' population was comprised of persons 60 and over. Indeed, a very different scenario than in 1962. Although there are only 101 of them (26 of which have 10,000 or more inhabitants), they show a number of similarities with the preceding group. In fact, some of them could have even been classified in the first group. Frequently, these communities border those in the first group, and they have never been very far from the 20% "threshold" (with the notable exception of Le Raincy and Pavillons-sous-Bois, the only communities of Seine-Saint-Denis in this group).

- Nogent-sur-Marne, Joinville-le-Pont, Charenton-le-Pont and Saint-Maur-des-Fossés, in addition to Saint-Mandé, Vincennes and Le Perreux, make up a compact geographic ensemble;
- Boulogne-Billancourt is located just beyond the 16th district in Paris, and Montrouge is the continuation of the 14th district;
- Montmorency borders Enghien;
- and La Garenne-Colombes adjoins Bois-Colombes.

By contrast, other communities in this group have seen a steady and significant aging of their population throughout this period. For example, between 1962 and 1990, the adjacent cities of Sceaux and Bourg-la-Reine have seen their population of persons 60 and over increase from 13% to 24% and 15% to 22% respectively. Such developments are similar – albeit to a lesser extent – in most of the other cities in this group.

What distinguishes these communities from the others in the group? Essentially, more modern housing.

All of these communities (Sceaux, Bourg-la-Reine and Saint-Cloud, for instance) have one thing in common: the massive construction of housing during the 50s and 60s. This differentiates them from the others, whose urban development is older. Since this period, however, there has been little construction in these communities; in 1990, less than 20% of housing was constructed after 1975.

Therefore, the rapid ageing of these communities between 1962-1990 reflects the "on-site" ageing of a portion of the massive wave of people who moved to the community during the 50s and 60s (this concerns only a portion of the population; many have since moved, especially since rentals represent almost half of total housing). This connection is consistent in all the communities of Ile-de-France. Nonetheless, these communities present other differences which may place them on deviating future "paths."

"Well-to-do" communities like Sceaux or Saint-Cloud may maintain a high rate of aging, without necessarily seeing any further significant increases.

On the one hand, real estate prices naturally filter new arrivals according to revenue, but also according to age, as the two are closely linked. As a result, parents are older than average, as are their children. The latter go to secondary school rather than nursery school and leave the family nest (and more often than not the community) just as quickly. Moreover, their parents – high-level executives – have a much higher life expectancy than average. All of these factors contribute to maintaining a high level of the 60

and over age group in these communities.

But the trend towards a "middle-class" environment and the ageing of the population in these communities is continually hindered. In fact, the population is constantly changing due to a large quantity of rental housing and a considerable number of small flats. Like in other areas, this trend is also affected by the decease of the most elderly persons.

On the other hand, in communities like Juvisy-sur-Orge and Draveil (in which respectively 20% and 15% of the working population is comprised of high-level executives, against 45% in Sceaux), the population is expected to rejuvenate once the effects of the massive housing development of the 50s and 60s are "mitigated." Property values in these communities are lower than those in Sceaux, and new arrivals are younger.

27% of housing in Draveil is comprised of low-income housing (compared to 10% in Juvisy and 16% in Sceaux). The majority of new arrivals are families with young children. By contrast, the city of Juvisy has a large number of small flats (38% are studios and 1-bedroom flats, against 16% in Draveil and 26% in Sceaux). The consistent flow of incoming residents are mostly young adults with no children, while outgoing residents are usually families with young children.

These differences are illustrated in the evaluation of rises and falls according to the age of the population in Juvisy and Sceaux between 1982 and 1990.

## "Greying communities" no longer considered as such

In 1990, less than 20% of these communities' (547 out of 1,300) population was comprised of persons 60 and over. However, this was not always the case. At some point between 1962 and 1982, all were classified as "greying." Within this group, many small rural communities (336 counted less than 1,000 inhabitants in 1990) felt the effects of "periurbanization", albeit to varying degrees.

Let us take one example. The small town of Nonville, located near Nemours (in Seine-et-Marne), counted 508 inhabitants in 1990. The proportion of persons 60 and over was practically halved between 1962 and 1990 (from 29% to 16%). The reason for this is simply due to the construction of new housing (69). Although this may not seem considerable in absolute terms, it is significant considering the existing amount of housing (171). By 1990, two out of five flats were at least fifteen years old. Even though the number of persons 60 and over did indeed increase (from 76 to 80), it was much less of a rise than that of the population as a whole (from 318 to 508 from 1975 to 1990). This led to a rejuvenation of the population.

In general, the construction of new housing is the highest contributing factor in the rejuvenation of the population in these communities (and generally in other areas in the Ile-de-France region).

For a number of communities, however, only a moderate rejuvenation was observed. In two out of five cases, the 60 and over age group still represents between 16% and 20% of the population. This is particularly true in certain districts in Paris (2nd, 3rd, 10th, 11th, 13th, 18th, 19th, 20th) and in surrounding cities (Issy-les-Moulineaux, Vanves, Saint-Maurice, Les Lilas, Asnières and Courbevoie). Contributing factors differ according to the city.

Many have undertaken the construction of a large number of flats. However, they are generally small and similar to existing flats (13th, 19th, 20th, Issy-les-Moulineaux, Vanves, Saint-Maurice, Les Lilas, Courbevoie). Saint-Maurice, for instance, is an extreme case; half of the current housing was constructed between 1975 and 1990. Nonetheless, the "rejuvenation" of the population was moderate (from 24% to 18% during this period) due to the small-sized flats. In terms of the number of additional inhabitants, the construction of four studios was equivalent to a single house. In Saint-Maurice, however, 60% of housing was comprised of studios or 1-bedroom flats. Consequently, there was less of a rejuvenation than expected, considering the intense property initiatives taken by the city during this period.

By contrast, other communities enjoyed a spectacular rejuvenation. In Savigny-le-Temple, Noisiel, Courcouronnes and Vauréal, "mushrooming communities" located in new cities, the proportion of persons 60 and over did not exceed 5% in 1990 (compared to 20% or more about 20 years earlier). Not only does the housing constructed between 1975 and 1990 constitute most of the total housing (between 72% and

92%), it is much bigger than in Saint-Maurice (less than 6% are studios and 1-bedroom flats).

The rejuvenation of the population in certain districts in Paris (2nd, 3rd, 10th and 18th) is attributed to other phenomena, as little housing was constructed in these areas between 1975 and 1990 (less than 10% of total housing in 1990). It translates into a sort of "auto-regulatory" mechanism which may be explained as follows: the higher the proportion of the 60 and over age group in a community or district, the quicker the population will tend to rejuvenate following the decease of these persons. And this holds true, as long as it remains "attractive."

This tendency holds true for the four above-mentioned districts in Paris. The number of persons 60 and over, who represented one-fourth of the population in the early 70s, subsequently declined significantly: from 8,000 to 3,800 in the 2nd district between 1968 and 1990; 13,000 to 6,600 in the 3rd; 26,000 to 16,000 in the 10th; and 57,000 to 36,000 in the 18th. Today, the 60 and over age group represents 17% - 19% of the population in these districts; a high proportion that is in keeping with the type of housing found in Paris (mentioned earlier).

In fact, this "auto-regulatory" mechanism is quite widespread throughout the entire region. Frequently, however, it only represents a single contributing factor among other local developments.

## Other communities: from «almost greying» to very young

Unlike the preceding groups, this group (506 out of 1,300) has always had less than 20% of persons 60 and over in their population over the last thirty years.

In 1990, this included most of the Ile-de-France communities of 10,000 inhabitants or more (190 out of 252). However, the aging of their populations varied considerably from one community to another.

Forty-five could be classified as "almost greying" (in relation to the preceding groups, which they often border). The 60 and over age group in these communities represent between 16%-20% of their population.

By contrast, others have a very young population; 58 count less than 12% of

persons 60 and over. And this proportion decreases to less than 6% in twelve of them. Not surprisingly, they are all located in new communities, which reported a sharp increase in housing between 1962 and 1990.

There has also been a considerable increase in population; the 1990 census revealed 6 to 69 times the population in 1962.

Evry was the most populated community in 1962, with 4,700 residents. In 1990, this figure jumped to 46,000! As for the least populated community of Lognes, its population soared from 317 to 12,973 inhabitants.

Of course, these are extreme cases. Nonetheless, they accentuate the close links between housing (its history and characteristics) and its residents (their structure and changing dynamics) on a local level [2][3][4]. These links have been fully confirmed by econometric analyses (see box).

## FOR FURTHER INFORMATION

[1] BOURDELAIS Patrice, « L'âge de la vieillesse », Paris, Odile Jacob, 1993, 441 p.

[2] LOUCHART Philippe, « L'influence du parc de logements sur la structure et la dynamique par âge des populations à l'échelon local . I- Eléments d'analyse », Paris, Iaurif, 1997, 120p.

[3] RHEIN Catherine, « Transformations urbaines et vieillissement démographique dans l'agglomération parisienne , 1954-1982 », Espace-Population-Sociétés, 1987, n°1, pp. 153-170.

[4] « Atlas des Franciliens », Tomes I et II, Paris, Iaurif-Insee, 1991/1992.

## The role of housing reinforced by econometric analyses

Over 90% of the disparities between communities observed in 1990 regarding the 60 and over age group are attributed to variables associated with housing: its relative age, charm, value, average surface area, etc. Two of these – the average age of housing and property values, estimated according to the proportion of high-level executives among the communities' working population – explain over 80% of the dissimilarities between communities.

The links between these two variables are clear:

- the more recent the housing, and the more construction of new housing within recent years, the "younger" the population;
- the higher the property values, the "older" the population.

The other variables involved in the linear regression simply identify the exact nature of links between the characteristics of housing and the proportion of "elderly" persons in a community. They are all quite significant.

The same goes for the average size of housing. The bigger the housing units in a community, the higher the number of families with children and the "younger" the population appears (for a similar average age of housing).

Moreover, when important urban development phases are old (like in Paris), their impact on the degree of ageing in a community is not perceptible; in time, it is diminished. Consequently, the average age of housing overestimated the "aging" of the population in these communities in 1990. This difficulty is offset by including the proportion of housing constructed before 1915 in the regression

(1) The number of persons per room that would be observed in each community if these persons had the same age groups as the regional population.

(2) They are found in the 8th and 16th districts in Paris, Neuilly-sur-Seine, Saint-Cloud, Ville-d'Avray, Garches, Versailles, le Chesnay, Fontenay-le-Fleury, Saint-Germain-en-Laye, Maisons-Laffitte, Enghien-les-Bains, Le Raincy, Saint-Maur-des-Fossés, Sceaux, Bourg-la-Reine and also Fontainebleau (See Volume II of the Atlas des Franciliens, pp 14-15).

On the other hand, the impact of housing constructed an average of about thirty years ago (between 1949-1967) varies according to the current rate of occupancy:

- there appears to be a low rate of "ageing", especially since there was a significant amount of rental housing constructed during this period;
- on the contrary, the higher the number of owners in 1990 residing in homes constructed between 1949-1967 (especially single family houses), the higher the rate of "ageing" in the community.

On a more qualitative scale, four additional variables enable us to further assess the proportion of the 60 and over age group within a community:

- the proportion of housing without modern conveniences in a community. The higher this proportion in 1990, the lower the number of elderly persons in the community. This not only shows an improvement in housing conditions for elderly persons, but also that this type of housing does not meet their expectations. Today, this type of housing is concentrated more in the city center and, above all, includes small flats rented by a younger population.
- the average number of persons per room (adjusted according to the effects of the age structure<sup>1</sup>). The higher this number, the more cramped the households. As a result, the "ageing" of the population in the community seems limited.
- the proportion of secondary homes, which may reflect the "charming" characteristics of a community. The higher this number, the more pronounced the aging of the communities' residents.
- housing with a well-balanced number of rooms, and nearly as many small as large units. This is quite rare in Ile-de-France and is only found in so-called "well-to-do" communities<sup>2</sup>. Like the preceding variable, this one tends to reinforce ageing in a community.

Lastless, other more local variables were also included. These variables are associated with the existence of collective housing structures in a community, such as the proportion of long-stay patients in hospitals, persons in retirement homes, student residences, young working people or incarcerated persons. Such variables could explain, for instance, the extremely young population of Fleury-Mérogis (the name itself is that of the prison). Or, they could account for the considerable ageing in Vaux-sur-Lunain, a small community (219 inhabitants in 1990) in the department of Seine-et-Marne, where over half of the population is over 60 and where is located a 130-bed retirement home.

This approach also explains the wide range of rises and falls observed in Ile-de-France between 1975 and 1990. The proportion of variance explained (approximately 90%) and the variables used are similar.

Some explain the rapid growth of the 60 and over age group in a community. It can be attributed to a significant amount of housing units constructed between 1949-1967, particularly if they are occupied by the owners, or a large number of high-level executives among the working population.

Most of the other variables are factors that contribute to the "rejuvenation" of the population, such as:

- a high proportion of elderly persons in 1975. The more "elderly" the population in 1975, the stronger its tendency to rejuvenate between 1975-1990. This indicates that the renewal of the population, brought about by the decease of the most elderly persons, is a factor for its "rejuvenation" on a municipal level in Ile-de-France.
- considerable construction of housing between 1975-1982, and especially between 1982-1990, above all when units are occupied by their owners
- significant number of large-sized housing, particularly regarding collective flats.



# On ne vit pas plus longtemps aujourd'hui qu'hier

**M**édecins et démographes sont unanimes : on ne vit pas plus longtemps aujourd'hui qu'hier. Au milieu du XVIII<sup>e</sup> siècle, quand l'espérance de vie culminait à 25 ans, très peu de personnes décédaient en fait réellement à cet âge. La moitié des décès se produisaient soit avant l'âge de 5 ans, soit tout au long de la vie et ce jusqu'à un âge très avancé. La moyenne donnait 25 ans. Aujourd'hui, l'âge limite de longévité humaine n'a pas varié — il se situe toujours autour de 120 ans —, simplement de plus en plus d'hommes et surtout de femmes « accomplissent un parcours de vie complet », nous dit Jean-Claude Henrard. Pour fixer les idées, la moitié des Franciliennes décédées en 1996 avaient plus de 83 ans. Toutes avaient moins de 112 ans.

Jusqu'à présent, aucune révolution biologique, donc, derrière la formidable croissance de l'espérance de vie enregistrée tout au long de ce siècle. Mais qu'en sera-t-il demain ?

Les progrès actuels de la biologie moléculaire, considérables depuis le début des années 90, permettront-ils de repousser l'âge limite de la vie humaine ? Disons que cela ne semble plus impossible, et qu'en même temps, le chemin à parcourir demeure considérable et soulève nombre de problèmes éthiques<sup>1</sup>.

<sup>1</sup> Le décodage complet du génome humain est annoncé pour la fin de l'année 2005. Restera alors à comprendre ce que signifie ce « texte » de plusieurs milliards de « caractères » ... sachant que « le plus fascinant dans ce que nous avons découvert ... est que la vie n'est pas une mécanique, ... ce qu'on peut en savoir ne permet pas de prédire son avenir. La vie est justement ce processus matériel qui a découvert que la seule manière de gérer un avenir imprévisible est d'être capable, par construction, de produire soi-même de l'imprévu » Antoine DAN-CHIN : « La barque de Delphes - ce que révèle le texte des génomes », Editions Odile Jacob, 1998, page 276.

## La durée moyenne de vie continuera-t-elle à progresser ?

Si l'âge limite de la vie humaine n'est pas repoussé à l'horizon 2050, peut-on alors imaginer, comme le fait l'Insee, que la progression de l'espérance de vie va se poursuivre pour plafonner, dans la première moitié du XXI<sup>e</sup> siècle, à 90 ans chez les femmes et à 82 ans chez les hommes ?

Les médecins interrogés lors de ce séminaire n'ont pas de certitudes sur ce point, même si aujourd'hui, selon **Françoise Forette**, « aucun élément objectif n'indique que la progression de l'espérance de vie va s'interrompre. »

Et, ajoute-t-elle, dans l'incertitude où nous sommes, mieux vaut réfléchir aux conséquences à attendre d'une croissance forte du nombre de personnes âgées et surtout très âgées.

Dans le cas de la France, si les hypothèses de mortalité retenues par l'Insee se vérifiaient, la population française âgée de plus de 75 ans pourrait tripler en 50 ans, passant de 3,5 millions en 1995 à 10,7 millions en 2045 et celle de plus de 85 ans quadrupler, pour atteindre 4,1 millions en 2045.

Les deux grandes questions auxquelles ont alors essayé de répondre les médecins, gériatres, épidémiologistes et démographes réunis pour ce séminaire peuvent s'exprimer ainsi :

Quelles conséquences à attendre dans la prise en charge des problèmes de santé chez les personnes âgées ? Que nous disent réellement ces chiffres quant à l'état de santé futur de ces personnes ?

## Rester à domicile le plus longtemps possible

**Philippe Pépin**, dans sa contribution, fait le point sur les modalités de prise en charge actuelle des problèmes de santé chez les personnes âgées et montre bien que seule une minorité de personnes « âgées » vivent en institution, même au-delà de 85 ans, et même si elles sont confinées au lit ou au fauteuil. L'entrée en institution reste l'exception. Elle s'avère le plus souvent subie par l'intéressé et précipitée par un événement « malheureux ». Mais le recours à des services de soins à domicile n'est guère plus fréquent. D'où ces deux questions qui structurent la contribution de **Philippe Pépin** : ce constat traduit-il avant tout une offre insuffisante et inadéquate par rapport aux attentes des personnes âgées ou correspond-il vraiment à leur souhait réel ? Faudra-t-il progressivement médicaliser toutes les maisons de retraite puisqu'on y entre de plus en plus tard et dans un état de santé de plus en plus dégradé ?

## Du traitement de l'aigu à la prise en charge de la chronicité

Pour **Jean-Claude Henrard**, cette révolution sociale et démographique que constitue l'accroissement des personnes très âgées posera à l'avenir, et avec de plus en plus d'acuité, les questions du maintien de la quantité des soins nécessaires et de leur qualité, ainsi que de l'organisation et du financement des systèmes de soins.

L'analyse des différences actuelles entre pays membres de l'Union européenne illustre bien, selon lui, l'importance des choix politiques dans les solutions retenues.

En outre, dans le domaine sanitaire, le vieillissement de la population voudrait que le système de santé évolue davantage vers une prise en charge de la chronicité alors qu'aujourd'hui, la priorité est donnée au traitement des épisodes aigus et aux solutions médico-techniques. Une priorité qui conduit d'ores-et-déjà à une utilisation inadéquate de services hos-

pitaliers aigus et qui ne peut que s'accroître dans un contexte de vieillissement de la population. Pour **Robert Moulia**, ces dysfonctionnements hospitaliers, dont il détaille l'origine, les mécanismes et au final les conséquences douloureuses pour les malades, tiennent pour une large part à l'absence de gériatres hospitaliers et universitaires.

Un avis partagé par **Françoise Forette** qui insiste aussi sur la prévention possible de nombreuses maladies chroniques.

## La prévention

Une vraie politique de prévention pourrait, selon elle, entraîner une diminution sensible de certaines situations d'invalidité physiques ou mentales. Des traitements existent déjà, nous dit-elle, pour éviter ou retarder des maladies graves comme l'ostéoporose ou la maladie d'Alzheimer, et pour des maladies moins graves, mais plus nombreuses et également invalidantes, comme l'incontinence urinaire ou les troubles sensoriels. La diffusion de ces traitements préventifs représente un coût élevé, qui pourrait être largement compensé socialement par l'amélioration des conditions de vie des personnes âgées, et financièrement, par les économies réalisées sur les traitements curatifs.

Pour **Françoise Forette**, la prévention voulue de son propre vieillissement reste donc le meilleur choix. Elle passe certes par une meilleure information des médecins et du grand public, mais aussi par la création de centres experts en gérontologie. Elle suppose aussi une capacité à se projeter dans l'avenir ... que n'ont pas ceux qui vivent au jour le jour.

Et c'est bien là une autre limite du modèle biomédical actuel que souligne **Jean-Claude Henrard** : ce modèle néglige l'impact des déterminants sociaux de la santé, liés à l'environnement individuel et collectif.

Or, l'état de santé des personnes âgées, toutes les études le montrent, est largement stratifié selon leur statut socio-économique, lui-même lié à leur niveau socio-éducatif qui conditionne en partie l'accès aux

soins et l'intérêt porté à la prévention. D'où, pour lui, l'intérêt de développer localement des politiques intersectorielles (au niveau de la ville par exemple) contribuant à la préservation de la santé des populations et l'utilité d'équipes médico-sociales de proximité.

## Ajouter de la vie aux années

Après avoir permis à un plus grand nombre d'atteindre des âges élevés, le défi est aujourd'hui que les années gagnées soient des années en bonne santé. D'autant que sur ce point, les résultats des travaux du Crédoc (Centre de recherche pour l'étude et l'observation des conditions de vie) présentés par **Marie-Odile Simon**, sont très clairs : la perte d'autonomie liée à la dégradation de l'état de santé est la principale crainte des retraités. D'où l'intérêt d'un indicateur comme celui de l'espérance de vie sans incapacité que décrit **Alain Colvez**.

Malgré ses difficultés conceptuelles — l'incapacité débute t-elle quand on ne peut plus faire son ménage ou quand on ne peut plus quitter son lit — et des difficultés de recueil infiniment plus grandes que le recueil de l'information des décès —, les mesures réalisées depuis une quinzaine d'années permettent d'effectuer les premières comparaisons dans le temps. Et de conclure à une évolution favorable de l'espérance de vie sans incapacité. L'accroissement de l'espérance de vie, en France, s'est accompagnée depuis dix ans d'une augmentation de la part du temps vécu sans incapacité.

## Pour une prise en charge globale de la dépendance à l'échelon local

Cette note optimiste demande à être confirmée pour l'avenir. Surtout, elle ne doit pas conduire à nier les besoins de prise en charge de la dépendance lourde. La mise en place récente de la « Prestation spécifique dépendance » (PSD), élaborée de façon à n'engager aucune ressource supplémentaire par rapport au système de prise en charge qu'elle remplace, ne permet pas, selon **Alain Colvez**, de combler

les carences actuelles.

La PSD, dont **Marie-Odile Simon** rappelle les principes, les grandes lignes de la mise œuvre et les résultats de l'évaluation effectuée par Crédoc, s'adresse aujourd'hui à 300 000 personnes environ, alors que le nombre de personnes réellement dépendantes est d'environ 700 000 en France.

L'aspect le plus positif de cette nouvelle prestation est qu'elle est accordée après une évaluation des besoins de la personne âgée par une équipe médico-sociale. Cette évaluation pourrait constituer le fondement d'une véritable politique gérontologique à deux conditions :

- être étendue à l'ensemble des personnes dépendantes — et non réservée à celles qui entrent dans le champ de la prestation —,
- déboucher sur une prise en charge globale de la dépendance, incluant tous les acteurs à un niveau local (les médecins, l'hôpital, les associations d'aide ménagère et de soins infirmiers à domicile, les maisons de retraite, etc) et mettant la personne et ses capacités au cœur du dispositif.

Malheureusement, le risque est grand, selon **Alain Colvez**, de s'orienter vers une simple gestion technocratique et centralisée de cette prestation dans chaque département avec comme préoccupation majeure de répondre à la question suivante : la personne âgée a-t-elle droit à la PSD ?

Pourtant, pour un coût relativement faible, la coordination des ressources locales pourrait largement améliorer les conditions de vie des personnes dépendantes et de leur famille, et générer d'importantes économies en évitant notamment la médicalisation excessive des problèmes de santé ou l'institutionnalisation précoce que souligne **Jean-Claude Henrard** et les transfèrements inutiles des personnes âgées que dénonce **Robert Moulias**. Encore faut-il que les ressources existent, en particulier lorsqu'il s'agit de prendre en charge des pathologies

déméntielles qui, aujourd'hui, sont très souvent traitées en service de long séjour faute de structure plus « légères » et plus « locales », de type « cantou » : celles-ci proposent une prise en charge bien adaptée à ces malades quand ils ne se présentent pas d'autres pathologies associées.

Ce suivi des situations les plus lourdes pourrait être complété par la mise en place d'un système national d'observation de l'état de santé permettant, par des mesures répétées de divers indicateurs, de suivre l'évolution sanitaire de l'ensemble de la population française. Car le vieillissement n'est pas un processus spécifique de la dernière partie de la vie, mais une suite de mécanismes biologiques qui se succèdent à des rythmes différents de façon naturelle et continue pour tout être vivant.

# Populations do not live longer today than in the past

**D**octors and demographers all agree: the population does not live longer today than in the past. In the mid-XVIIIth century life expectancy was only 25. However, very few people actually died at this age. Half of the deaths occurred either before the age of 5 or at some point in life up to very elderly ages. The average was 25 years. Today, the age limit for human life expectancy is not so varied; it has been established at around 120 years. According to **Jean-Claude Henrard**, the difference today is that men, and especially women, have "been living complete lives." To give you a better idea, half of the Ile-de-France residents who died in 1996 were between 83 and 112.

The tremendous increase in life expectancy over this century can therefore not be attributed to any biological changes. But what does the future hold? Will the considerable advances in molecular biology since the early 90s prolong human life expectancy? That no longer seems possible, and at the same time the road ahead is long and gives rise to a number of ethical problems<sup>1</sup>.

(1) The complete deciphering of the human genome is expected by late 2005. We must then try to understand the meaning of a "text" which is composed of several billion "characters." It should be kept in mind that "the most fascinating thing we have discovered... is that life is not a mechanism, ... what we may know does not enable us to predict its future. Life is, in fact, a material process which discovered that the only way to confront an unpredictable future is to be capable, through creation, to produce the unpredictable on one's own," Antoine DANCHIN: "La barque de Delphes – ce que révèle le texte des génomes," Editions Odile Jacob, 1998, page 276.

## Will the average life expectancy continue to increase?

If the age limit of human life expectancy is not prolonged by the year 2050, is it possible then, as the Insee maintains, that life expectancy will continue to increase until it reaches a maximum of 90 years for women and 82 for men in the first half of the XXIst century?

Doctors questioned during the seminar were uncertain on this point, even if today, according to **Françoise Forette**, "no objective element indicates that there will be a stop to the increase in life expectancy."

She adds that, considering the present uncertainty, it is better to consider the possible consequences of a strong increase in the number of the elderly and, in particular, very elderly persons.

In France, if the mortality forecasts established by the Insee are accurate, the French population over 75 could triple in 50 years. This would mean an increase from 3.5 million people in 1995 to 10.7 million in 2045. The number of persons over 85 would quadruple to 4.1 million people in 2045. The two major questions addressed by doctors, geriatricians, epidemiologists and demographers during the seminar were the following: What are the ensuing effects of providing health care for elderly persons? What do the figures really indicate regarding the future health conditions of this population?

## Living at home as long as possible

**Philippe Pépin** addresses the current methods used for providing assistance to elderly persons with health problems.

He also clearly shows that only a minority of "elderly" persons live in an institution, including persons over 85 and those confined to a bed or chair. The only exception is admittance into an institution. The individual concerned frequently admits him/herself, and this is often prompted by an "unfortunate" incident. But there is hardly more demand for home care services. **Philippe Pépin**

focuses his observations on the following two questions: Does this fact indicate above all an insufficient and inadequate supply in relation to the expectations of elderly persons, or does it reflect what they really want? Should retirement homes progressively be equipped medically to meet the needs of residents admitted at more elderly ages within creasingly deteriorating health conditions?

## From the treatment of serious cases to taking charge of chronicity

The mounting numbers of very elderly persons will bring about significant social and demographic changes. According to **Jean-Claude Henrard**, this will increasingly give rise to questions concerning the effective quantity and quality of necessary care as well as of the organisation and financing of health systems. He believes that the assessment of the current differences between European Union member countries clearly illustrates the importance of political choices in the solutions implemented. Moreover, regarding the health sector, the steady aging of the population would call for the health system to take further measures to address the problem of chronicity.

But presently, priority is given to the treatment of serious incidents by use of medico-technical solutions. Such a priority already results in the inadequate use of emergency hospital services, and will only intensify as the population continues to age. **Robert Moulia**s outlines the source of these dysfunctional hospital services, the mechanisms and the painful effects on the patients. He contends that they are largely due to a lack of hospital and university geriatricians; an opinion shared by **Françoise Forette**, who also stresses the possible prevention of numerous chronic diseases.

## The prevention

According to **Françoise Forette**, a real prevention policy could significantly decrease certain forms of physical and mental disorders. She states that treatments have already been developed to avoid or defer serious diseases like osteoporosis or Alzheimer's disease. Treatments are also available for less serious, but more frequent and disabling diseases such as urinary incontinence or sensory problems.

Such preventive treatments are costly. But these costs could be largely compensated for socially by improved standards of living for elderly persons, and financially by savings made on curative treatments. **Françoise Forette** therefore believes that the prevention required for the ageing process is still the best choice. She not only expresses the need for raising awareness of doctors and the general public, but also for creating centres specialised in gerontology. She also explains that the notion of prevention assumes the ability to look to the future; something which people who live from day to day do not have.

According to **Jean-Claude Henrard**, this represents another limit to the biomedical model: it does not take into account the social health determinants associated with individual and collective environments.

All of the studies conducted show that the health conditions of the elderly are largely stratified according to their socio-economic status. This status is, in turn, associated with their socioeducational level which, in part, affects their access to care and the interest shown in prevention. This is why he feels that local sector-based policies should be developed (for instance, on a municipal level) in order to help preserve public health and turn to the services of local medico-social teams.

## Adding life to one's years

Now that a large majority of people reach very elderly ages, the challenge we face today is to enable elderly persons to live out these extra years in good health.

The results from studies conducted by the Crédoc (Research centre for the study and observation of living standards) presented by **Marie-Odile Simon** are quite clear: the greatest fear of retired persons is the loss of autonomy associated with deteriorating health conditions.

Hence, the interest in an indicator such as life expectancy without disabilities described by **Alain Colvez**. This involves conceptual difficulties (is one considered disabled when one can no longer do housework, or when one is bedridden) as well as infinitely greater difficulties in collecting such data than for collecting data concerning deaths.

However, measures implemented over the last fifteen years or so, allow for initial retrospective comparisons to be made.


The results reported a favourable development of life expectancy without disabilities. In France, the increase in life expectancy has, for the last ten years, also included a rise in the period of time lived without disabilities.

## Global management of dependency on a local level

This optimistic note is awaiting confirmation for the future. Above all, it should not lead to the denial of needs in severe dependency care.

The Dependency-Specific Service (PSD) was elaborated such that it would require no more resources than the system it replaced. But according to **Alain Colvez**, its recent implementation does not fulfil the current deficiencies. **Marie-Odile Simon** calls to mind the principles of PSD, the main lines of its implementation and the results of the evaluation carried out by Crédoc. Today PSD concerns about 300,000 persons, whereas there are about 700,000 in France who are truly dependent.

The positive aspect of this new service is that assis-



tance is provided after the elderly person's needs are evaluated by a medico-social team. Such an evaluation could be the foundation of a real gerontology policy under two conditions:

- that it be made available to all dependent persons — and not restricted to those who fall within the limits of the service,
- that it lead to the global management of dependency, by including all actors on a local level (doctors, hospitals, home care and home nursing care associations, retirement homes, etc.) and by placing the person and his/her capacities at the heart of the system.

Unfortunately, **Alain Colvez** points out, there is a big risk. This could result in a service with a technocratic and centralised management in each department, where the main concern would be to determine whether the elderly person was eligible for PSD.

Yet, for a relatively low cost, the co-ordination of local resources would significantly improve the living standards of dependent persons and their families. Furthermore, it would allow for considerable savings by eliminating the need for excessive medical care for health problems or the premature placement in an institution, as pointed out by **Jean-Claude Henrard**, as well as unnecessary transfers of elderly persons denounced by **Robert Moulis**.

The monitoring of the most severe situations could be complemented by the implementation of a national system for the observation of health conditions.

Through periodic measures of various indicators, the health developments of the entire French population could be monitored.

For ageing is not a process specific to the final stage of life. It is a series of biological mechanisms that occur successively at varying rhythms in a natural and continuous manner for every human being.



# Managing health problems among elderly persons

**Philippe Pépin**

Demographer

ORSIF<sup>1</sup>

**In 1994 in France, approximately 13% of persons over 75 and 27% over 85 years of age lived in an institution (including residences).<sup>1</sup>**

**These figures clearly show that placement in an institution is by no means systematic, even among the most elderly persons. It is also commonly thought that a high level of dependency requires placement in an institution.**

**However, the majority of highly-dependent persons are not in institutions : a study conducted in three French regions shows that out of 100 persons over 65 who are bedridden or confined to a chair, 75 live at home and 25 in an institution.<sup>2</sup>**

Conducted by the Ile-de-France Regional Health Observatory (ORSIF), the study regarding the living conditions of Parisians over 70 living at home indicates that 6% of them, or approximately 12,000 highly-dependent Parisians over 70 (persons who are bedridden or confined to a chair, and individuals who require assistance for washing up and getting dressed) live in their homes.<sup>3</sup>

This figure should be compared to the 8,000 medically equipped spaces available in Paris (including those outside Paris, in the departments of the inner and outer suburbs of Ile-de-France).

A majority of dependent elderly persons thus do not reside in an institution. Is this specifically due to the fact that there is a lack of space, inappropriate facilities for meeting elderly persons' needs (fear of entering a gloomy old people's home, high costs, etc.), or does this fact simply reflect the true wishes of the elderly?

For lack of a precise answer to this question, studies confirm a widespread opinion: the vast majority of elderly persons, regardless of their health conditions and autonomy for going about their daily activities, aspire to stay at home for the remainder of their lives.<sup>4</sup>

**Neither a very elderly age nor any signs of dependency require a systematic placement in an institution.**

(1) Ile-de-France Regional Health Observatory

(2) Source : SESI - «*La clientèle des établissements d'hébergement pour personnes âgées - Situation au 31 décembre 1994*» - Mars 1996 et INSEE - estimation de population âgée de plus de 75 ans au 1-1-1994.

(3) A.COIVEZ «*Analyse de trois enquêtes homogènes en Ile-de-France, Languedoc-Roussillon et Basse-Normandie - Panorama de la dépendance en France*» - Revue française des affaires sociales Janv-Mar 1990.

(4) «*Conditions de vie des Parisiens âgés vivant à domicile en 1995*» - ORS d'Ile-de-France et A. COIVEZ - INSERM

(5) Marie Thérèse ESPINASSE - Bruno LEFFEBVRE «*Gestion de la dépendance et stratégie des personnes âgées*» - L'Harmattan 1992.

## The development of home care benefits less than 1% of persons over 65

Elderly persons find ways to manage dependency to avoid placement in an institution. These management methods take on various forms - often with the help of close relations, friends and especially family — and gradually become more complex as the dependency grows stronger.

When essential, family assistance is possible under two conditions:

- the availability of the children – which increases when the children themselves retire (and are in good health). This situation is increasingly common due to the increase in life expectancy.
- the geographic proximity – in 1984 in the Paris region, nearly half of elderly parents had a child living in the same town or same district, two out of three had a child in the same department, 90% in Ile-de-France. On average, of course, the more numerous the children, the higher the likelihood of family proximity.<sup>6</sup>

Family assistance appears to be just as common in Ile-de-France as in the rest of France. However, cohabitation is much more rare, notably in Paris where the lifestyle is different (more time spent in transports, more frequent meals outside the home, etc.) and living spaces are smaller.

Although the family plays an essential role in this balance, it is also becoming increasingly common to call on professionals: in 1982, 390,000 elderly persons received home help, a figure that climbed to 470,000 in 1992. Likewise, home nursing services have quadrupled in 10 years, rising from 11,000 positions in 1982 to 45,000 in 1992.<sup>7</sup>

Apart from these services, independent home care professionals provide the majority of home care assistance.

Despite the strong increase in the demand for home care services, less than 1% of persons over 65 receive such assistance.

This low figure is not only due to the fact that these services are still insufficiently developed, but also because it is not always easy for an elderly person to take the steps required (if only to inquire about the existence of these new services).

Moreover, while many elderly persons refuse to be placed in an institution, a large number of them also feel apprehensive about calling on home care services. They fear an intrusion into their privacy, the disclosure of their inner world and lifestyle to the eyes of outside assistants.<sup>8</sup>

These restraints in using home care services are generally stronger among the most disadvantaged elderly persons, while those in the most favored categories are often more aware of their rights and the steps required to benefit from them. They are also more accustomed to calling upon outside help.

Serious incidents (worsening health conditions, death of a spouse) and others that are less serious (discontinuation of assistance provided by a child, neighbor or friend, theft, etc.)

(6) E. CRIBIER - C.N.R.S. - 1986

(7) Source: CNAMTS - MSA - SESI

(8) Marie Thérèse ESPINASSE - Bruno LEFEBVRE. «Gestion de la dépendance et stratégie des personnes âgées»

(9) Source: SESI - «Les établissements d'hébergement pour personnes âgées - enquête EHPA» - Situation au 31 décembre 1996

may upset this balance and often lead to placement in an institution, sometimes following a hospital stay.

**In most cases the person concerned is admitted into an institution; a measure which may be accelerated by an “unfortunate” incident.**

## Admittance of elderly persons to housing establishments continues to increase

Today homes for the elderly include three major types of “traditional” structures: residences, retirement homes and long-stay hospital care services (formerly called long-stay services).

In 1996, the 9,000 establishments in France provided approximately 645,000 spaces. This represents an availability of 174 spaces per 1,000 elderly persons 75 and over.

Ile-de-France is slightly less well-equipped with 81,500 spaces, or 147 spaces per 1,000 elderly persons 75 and over.<sup>9</sup>

Despite the development of home care, admittance into establishments for the elderly continues to increase.

However, a more in-depth study of the characteristics and movements of the clientele in these establishments reveals a significant development: the average age of persons admitted slightly increased, while the time spent in institutions decreased.

These two indications confirm the gradual change that has developed over the last few years concerning care for dependent elderly persons: elderly persons live at home as long as possible and enter an institution only when the irreversibility of their health condition requires them to.

This change involves another: the development of medically equipped spaces in all housing establishments in order to prevent transfers when an elderly person's health worsens.

Most retirement homes and an increasing number of residences (logement-foyers) are already equipped with medical treatment units.

In 1996 in France, 136,000 medical treatment units were equipped for dependent or very ill elderly persons, in addition to 81,000 long-stay spaces. This represents 59 medically equipped spaces per 1,000 elderly persons 75 and over.

Ile-de-France appears particularly under-equipped, with 47 medically equipped spaces per 1,000 elderly persons over 75.

(10) Source : INSEE - «Projection de population totale pour la France métropolitaine - Horizons 1990-2050» - hypothèse centrale

## In the future, measures will depend on the number and the health condition of elderly persons

It was noted that the measures required to deal with the dependency of elderly persons are difficult to evaluate; neither a given age nor an inaptitude to carry out the principal activities of daily life call for resorting to a specific unit or equipment.

As a prospective step, these evaluations are even more delicate, as two major unknowns must be considered: the number and the health condition of elderly persons.

Yet, the number of elderly persons can be relatively forecast for the year 2010 or 2020<sup>(10)</sup>:

- in France, the number of elderly persons over 75 should increase from 3.7 million in 1996 to 6 million in 2020; those over 85 (in the same time frame) should rise from 1.1 million to 2.1 million.

- in Ile-de-France, there should also be a significant increase in the number of elderly persons, particularly in the outer suburban departments – the youngest in France – while in Paris the number of elderly persons should remain stable until 2010.

The disparities of the ageing population in Ile-de-France are the result of the population history of each department over the last fifty years. However, the driving force behind the increase in the number of elderly persons is the same throughout France – the significant, but relatively recent, decline in the mortality rate among very elderly persons.

## The declining mortality rate among elderly persons

Since the end of World War II, the number of deaths in France has remained relatively stable, ranging from 500,000 to 550,000 per year.

Considering the increase and ageing of the population in France during this period, such stability results in a significant decline in the mortality rate.

The decline is particularly eloquent when considering the two far-off dates in this period:

- 530,000 deaths were recorded in France in 1950 and in 1995,
- during this time, the population in France increased from 42 to over 58 million. The number of elderly persons 75 and over more than doubled, climbing to 3.6 million from 1.6 million.

During this period, life expectancy at birth went up from 63 to 74 years for men, and from 69 to 82 for women (the latter gaining 2 more years of life than men).

### Distribution of persons in residence by age and outgoing persons by length of stay

Distribution by age of persons in institutions								
	under 75 (%)		75-84 (%)		85 and over(%)		Average age (year)	
	1990	1994	1990	1994	1990	1994	1990	1994
All establishments (*)	20,9	21,1	40,7	34	38,4	44,9	82,4	82,6
Long term care (*)	16,7	19,7	36,1	30,9	47,2	49,4	80,7	81,8
Long term care (AP-HP) (**)	-	17,4	-	25	-	57,6	-	83,9

Distribution of outgoing persons according to the length of stay (%)						
	under 1year		1 - 3 years		4 years an over	
	1990	1994	1990	1994	1990	1994
All establishments (*)	22,5	50,9	35,9	27,1	41,6	22,1
Long term care (*)	31,2	53,1	42,3	29,8	26,5	17

(\*) source : SESI La clientèle des établissements pour personnes âgées - Enquête EHPA - Situation au 31 -12- 1990 et au 31 -12- 1994.

The decline in the mortality rate is also illustrated in the concentration of deaths at increasingly older ages: today in France, nearly three out of four deaths occur to elderly persons over 65, and one out of two deaths occurs to an elderly person over 80.

However, the decline in the mortality rate has not always concerned elderly persons.

A more in-depth analysis of the development in life expectancy over the last forty years reveals that the increase in the average life span varies greatly among the different age groups.

- the decline in the mortality rate up until the mid 1970s is largely due to a decrease in infant mortality, whereas certain pathologies increased among adults and elderly persons, especially men.

Such was the case for illnesses associated with the digestive system (increased alcohol consumption) and violent deaths (traffic accidents, accidental falls), which continued to rise until the early 1980s.

The was also the case for different forms of cancer, which increased in men until 1990 (whereas they decreased in women) due to a rise in male smokers (lung cancer quintupled in men over 65 between 1950 and 1990). Finally, illnesses associated with the circulatory system - the principal cause of death for elderly persons - remained stable until the mid 1970s (then declined sharply due to a combination of numerous factors: screenings, treatments for hypercholesterolemia and hypertension, development of dietetics, new medication, etc.).

- for women, however, the early 1970s (a bit later for men) saw a decrease in the mortality rate for elderly persons that gradually became significant.

This drop was such that between 1982 and 1992, the fall in the mortality rate for persons over 60 represented 56% of the increase in the average life span for men (70% for women) and 26% for men over 75 (nearly 45% for women).

The most recent mortality figures confirm the decline in the mortality rate among elderly persons for most pathologies.

On the rise since 1950, cancer in men, in particular, has been declining since the early 1990s (the slight increase in the mortality rate for persons over 75 recorded between 1990 and 1995 is solely due to a rise in the number of persons over 85 in this age group, which has a higher mortality rate than that of the 75-84 age group).

## Health developments in elderly persons : an increase in life expectancy without disabilities

The increase in life span leads to a rise in the number of elderly persons.

Will it also mean an increase in the number of elderly persons with health problems?

Indeed, the continual increase in life expectancy gives rise to a number of questions, such as the analysis of the quality of the years gained and the assessment of the overall health of the population, notably that of the elderly.

Since 1981, 10-year studies on health and medical care have revealed some facts regarding "problems, handicaps and disabilities" and allow for the evaluation of life expectancy "without disabilities".

In spite of certain difficulties encountered in comparing the results in 1991 to those in 1981, they show that life expectancy without disabilities increased at a slightly higher rate than life expectancy itself.

Therefore, between 1981 and 1991, life expectancy and life expectancy without disabilities for men increased by 2.5 and 3 years respectively. Life expectancy and life expectancy without disabilities for women rose 2.5 and 2.6 years<sup>(1)</sup> respectively.

These results contradict fears occasionally expressed regarding "the spread of morbidity" associated with the increase in life span, which is explained by the fact that the older one lives, the more serious the chronic illnesses that appear.

However, even though the gradual decrease in the average life span with dependencies may seem appealing and acceptable, certain details must be considered: first, there are only slight gains (0.5 year for men and 0.1 year for women over a period of 10 years); second, these gains represent only an average which may cover very different individual situations, particularly with the development of precarious situations over the last ten years or so.

(11) J.M. ROBINE - P. MORNICHE - INSERM - INSEE - «Les Français et leur santé - Enquête santé 1991-1992» - pp 17-36 Solidarité santé - Janv-Mars 1994.

# The health and social challenges of an ageing population in the European Union

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IFR et Santé vieillissement société

**T**he demographic revolution is not a result of people with much longer life spans, but of the fact that many more people are living full lives. In the future, the increase of the elderly population will raise the ever more pressing issues of solidarity between generations and the maintenance of the quantity and quality of the necessary treatment. The policies implemented by the European Union will have a profound effect on the future of the European models of the «welfare state»: the age for retirement, establishing pensions, organization and financing of health systems, etc.

At the advent of the XXth century, the population of elderly persons aged 65 and over represented 4 to 6% of the total population in today's EU (European Union) member countries. This ration increased in most of the countries throughout the century albeit at differing rates, reaching more than 10% between 1950 and 1960 in most European countries. In 1971, Sweden was the first country in which the 75-year age group represented 5% of the total population. In 1990, this percentage was reached by most of the countries in the European Union<sup>1</sup>. Our own country will be the first in which the elderly population over 80 will climb to 5% in the year 2000<sup>2</sup>.

The ageing of the population is attributed to the considerable fall in fertility rates and death rates, notably among infants. The latter is responsible for the large number of children who survive infantile diseases, which enables them to live beyond adulthood.

Since the 70s, the decline in the mortality rate has benefited elderly persons over 60, thus reversing the predominant mortality trend of the last two centuries. Today, this new trend is observed in very elderly persons, thus prolonging the average life span of these groups. The gap between the sexes has widened continuously due to

(1) OECD, 1988.

(2) OECD, 1996.

a sharp decline in the mortality rate among females. Some refer to this phenomenon as the «feminization of the ageing process».

Along with these demographic changes, governments have played increasingly important roles in regulating relations between the generations, by gradually implementing a pension system for persons who reach a certain age. This was followed by a smaller obligation of the children to assume the financial costs of their elderly parents; at the same time, elderly persons began living increasingly independent lives. These changes also brought about a genuine revolution of production, distribution and consumption of goods and services. This was followed by revolutions in transportation, communication and information mechanisms, all of which were witnessed by the older generations.

They have effects on health conditions, relations between generations in terms of profit-sharing and social security contribution, access to government aid and health care and their appropriateness to problems common to the most fragile elderly persons. Given the demographic forecasts, European Union member countries are faced with significant challenges that will have to be taken up in the near future.

## Health conditions of the elderly

The increase in the number of persons aged between 80-85 and over is due to the decline in the mortality rate among older generations. The rise in the percentage of handicapped persons within an ageing population raises the issue of the future health conditions of the elderly. Will a longer

life span also bring about an increase in the morbidity rate and the number of handicapped persons? The answers are contradicting.

For some, considering an average maximum life span of 85 and a maximum life span of 115-120 years of age, continued health improvements will be accompanied by an increasing concentration of morbidity and disability among the most elderly, notably in cases of late development of chronic diseases.

For others, the decline in the mortality rate of the elderly signifies - when it is not possible to prolong the ageing process and its consequences - that it will be increasingly difficult to influence the consequences of endogenous and exogenous occurrences that cause damage on the molecular level and are characteristics of the biological ageing process. If the theories of evolution are accurate, and if senescence is a multi-genic process, a longer life span for a majority of people will inevitably see an increase in the heterogeneity of very elderly persons. It is thus probable that pathological states, which today appear to be rare among the elderly, become more frequent; it is even possible that new diseases related to senescence may start to appear<sup>(3)</sup>.

Without closing the debate, it is important to point out that the processes that give rise to changing health conditions with age are largely stratified according to socio-economic status. **Certain studies show that the differences in health conditions increase with age according to revenue and the level of education, and this holds true up to a very elderly age. The decrease in the differences at a more elderly age may be due to a selection processes** - the most fragile persons from the lowest socio-economic groups die

before becoming old - and/or a larger balance of poor health risks attributed to greater universal biological frailty.

In general, due to the fact that women have a longer life span, the effects of age and gender combine to determine inequalities.

If women live longer, it is not because they are healthier than men of the same age, as shown by different morbidity data. The disequilibrium between the number of elderly men and women has numerous consequences. Many women are widows or live alone. Due to differing career paths between the sexes, women have low revenues and, consequently, poor living conditions. As they grow more fragile with age, certain more elderly women move in with one of their children. They also represent the highest percentage of elderly persons living in long term health care establishments.

The current difference in life span between men and women may decrease in the future. In fact, this notion is reinforced by the rapid decline in work-related risks for men in the second half of the XXth century, and the increasing adoption of masculine habits by women, such as the consumption of tobacco and alcohol.

Many people who have been faced with difficult living conditions and who hazardous health habits have very long lives. This indicates that there are other determining factors which control the links between age and health: sturdy physical nature, type of personality, quality of social assistance, etc.

(3) Numerous diseases or morbid states that develop late have genetic components (i.e., Alzheimer's Disease) thus sustaining such conclusions.

## Cross-generation relations and unofficial assistance

The place elderly persons hold within the family unit has profoundly changed, in part in a negative way. This transformation is part of a general movement of "modernity" in which the family goes from a social role to simple social relations.

As regards potential social assistance of elderly persons, there is significant diversity in the distance between elderly persons and their children. Elderly persons give and receive both social support and assistance. Generally, assistance for daily activities is provided by a single person, usually a wife or daughter. The difference in gender determines "who gives" and "who receives" in families.<sup>4</sup> Frail elderly men living alone have more difficulties adapting to a solitary life and are particularly vulnerable.

Accounts of elderly persons abandoned by their families still exist. Today however, adult children in most western countries<sup>5</sup>, notably daughters and daughters-in-law, provide additional and more difficult assistance to more elderly parents for longer periods than in the past. Domestic roles between the sexes have hardly changed at all concerning assistance to elderly parents.

The future possibilities of daughters assuming responsibility will decline significantly, due to a sharp fall in the ratio of middle-aged women in relation to elderly persons<sup>6</sup> that will continue in the future. Likewise, the increase in the number of women in the workforce<sup>7</sup> will have an effect on the possibilities to provide assistance: women will consecrate less to unpaid family tasks. The possibilities will vary from country to country:

in southern European countries where taking care of the elderly is a strong moral obligation, in other countries where it is a legal obligation (for example, France and Germany); it will be slowed in relation to countries where public intervention is the rule (Nordic countries).

## Professional assistance and care

### *The health sector*

Health expenses in the Gross National Product has not ceased to climb in European Union member countries since 1960: growth has slowed since 1980 and expenses per capita increase in a linear manner with age. This data, in addition to the predictable increase of the most elderly population, gives rise to a certain apprehension concerning the future costs of health care. In fact, the ageing of the population appears as only a small growth factor, and most of the increases in health expenses are due to an over-consumption of costly techniques, generated by the biomedical model of health and illness on which the medical profession bases its treatments. Moreover, the inadequate use of serious hospital services is attributed to the priority given to medico-technical solutions. The rationing of resources that may ensue could be based on age, without taking into account the effectiveness of the treatments. Finally, the biomedical model contributes towards providing medical solutions for social problems and neglects the impact of social health determinants associated with the individual and collective environment. As a result, there is insufficient awareness of more effective and efficient alternatives to meeting the demands of dependent handicapped and elderly persons.

It is necessary to examine the biomedical model and the support provided by public authorities for all procedures or technologies which have not been proven effective, in order to allocate more effective, efficient and equitable resources in the health care sector.

This means that forceful incentives must be developed to instill a stronger sense of responsibility in the medical profession for the effective practice of its members. The local development of cross sector-based policies (at a municipal level, for example) is important to help maintain public health. The knowledge of non-professional individuals must be taken into account, as they may challenge that of the experts: the views expressed by elderly persons themselves may call into question the medical perception of old age.

### *The medico-social sector*

The general consensus agrees that elderly persons should be permitted to live in their homes for as long as possible. For decades<sup>8</sup>, home care services have been a priority on political and professional agendas, both on a national and international level.

(4) Hugman, 1994

(5) Bouget, 1993

(6) In France, for example, 90% of home care received by the most dependent elderly persons is provided by unofficial assistants. In Sweden, they represent 2/3 of the assistance provided; in the United Kingdom, a nationwide survey conducted in 1986 estimated that 6 million adults provided assistance to the elderly of the handicapped.

(7) In 1990 for example, the ratio of women between 46-69 and elderly persons over 70 decreased by 59% in Germany and 70% in Italy compared to a corresponding ration in 1960 (OECD, 1996).

(8) For example, between 1960 and 1993 the number of middle-aged women with paid jobs increased from 37 to 46% in Germany, from 55 to 78% in Sweden, from 49 to 59% in the United Kingdom and from 18 to 24% in Italy (OECD, 1996).

(9) European Union Council, 1993.

As a result, a number of countries have developed services in the medico-social sector designed or used primarily by unwell elderly persons and the handicapped. These services are mostly provided in the home (a small part of which are provided in institutions) by various organizations and professions, and primarily include home help, providing meals, assistance for personal hygiene and home nurses.

**The importance of home care services and the proportion of the elderly population that receives assistance vary considerably from one country to another:**<sup>(10)</sup> for example, the Nordic countries and the Netherlands have developed a true medico-social system; France and Germany have done so, but to a lesser extent and, above all, in a much more insufficient manner<sup>(11)</sup>. Since the 1970s, pressure for greater efficiency of services in most European Union member countries gave rise to numerous projects aimed at replacing institution care with home care. A cross-border comparison of the respective importance of home care sectors and long term intramural care does not clearly show that the former replaces the latter<sup>(12)</sup>. In fact, substitution is an infinitely more complex process depending on recourse by age, by the degree of functional disability and the targeting of appropriate populations.

In the home care sector, the evaluation procedure usually appears more like a professional's determination of whether or not the client is suitable for the service rather than a precise evaluation of his/her needs. Consequently, targeting becomes an important factor, which raises two types of questions: can improved targeting help in the substitution process, and can it reduce costs?

By targeting persons likely to go into a long term institution or hospital, even-

tual admissions could be substituted by the intervention of home care services. However, this is a particularly delicate issue, as improved evaluation procedures in several countries reveal a decrease of inappropriate admissions in the intramural sector without the slightest intervention of home care services. Moreover, receiving assistance or care from a service at a given moment does not mean that one is likely to be placed in an institution at some point in the future, and a short term service could be discontinued in the long term.

Before concluding on a cost reduction, clientele changes must be taken into account: the concentration of services on the most difficult cases increases the costs of care for an equal number of clients. Therefore, in order to maintain costs at the same level, clients with less difficulties must be refused. Providing care for the latter thus gives rise to the possibility of substituting professional services by unofficial, cost-free assistance which help reduce social costs. The implications on costs also depend on the financing structure of the health care system<sup>(13)</sup>.

Another major issue is that of allowing elderly persons define their own social needs. Professionals are tempted to impose their own judgement over the experience acquired over a lifetime by elderly persons. In a number of southern European countries, certain centers which provide social activities and a medico-social clinic are open to all elderly persons. This promotes the rights and independence of the elderly regarding their choices: in other parts of the European Union, the determination of social needs is based predominantly on professional evaluation.

Institutional care, more or less developed in European countries, is faced with two trends: first, an ageing clientele

leads to an increasing number of persons with mental deficiencies and difficulties in carrying out essential daily activities; second, a policy aimed at redirecting patients with disabling chronic diseases or a terminal-phase illness placed in short term, very costly hospitals, to long term health care services. These trends lead to increased health care services, notably involving personal hygiene and supervision of long term services. Moreover, the large size of many institutions exposes residents to a possible loss of identity associated with a loss of contact with a circle of people, in cases where an institution covers a wide geographic area. This raises questions regarding the quality of life of persons living in an institution.

**In certain countries, alternatives to traditional institution care were developed for dependent or demented persons, in the form of small aid structures that call on home care services when needed**<sup>(14)</sup>. Denmark<sup>(15)</sup> has implemented a more general housing policy adapted to the very elderly that provides services according to their needs, thus decreasing institution care.

(10) Jamieson, 1991

(11) Henrard, 1992, OECD, 1996

(12) Most countries with a low rate of home care also have the lowest rate of intramural care (southern European countries). Two Nordic countries (Denmark and Finland) have the highest rate in both sectors. The majority have an average rate (between 5-10%) for both sectors with the exception of the Netherlands, which has a high rate of intramural care. Ireland and Germany have a more highly developed institutional sector (OECD, 1996).

(13) For instance, in countries where eligibility for services is subject to resources, and where financing authorities are not responsible for providing services (Germany and France), the allocation of services is usually based on the compliance to bureaucratic criteria (Jamieson, 1991). Financial assistance may vary according to the legal status of the health care establishment and the needs of the clients.

(14) For instance, in France, the United Kingdom, and Scandinavian countries (Hugman, 1994).

(15) Jamieson, 1992



Financing long term care poses another problem. It largely depends on the social welfare scheme which differs by extension of social rights, in terms of eligibility requisites, the financial contribution of beneficiaries and the role imparted to the family

In Scandinavian countries, eligibility and allocations and services are universal and independent from the traditional family assistance custom. Consequently, care is financed by the state.

In countries that have a national insurance scheme, eligibility is based on financial contributions during a person's professional life and is limited to recognized risks (i.e., illness and old age).

This system encourages the continuance of the traditional role of the family and is thus based on the subsidiary principle. This means that public authorities will not intervene until the family is no longer capable of assisting its members. Consequently, due to an increase in very elderly persons, long term health care financing (especially personal hygiene care) takes on a certain urgency and is part of the policy agenda. The different solutions chosen (new social risk in Austria and Germany, assistance service provided by social security in France) depend on more political factors.

When southern European countries changed their social welfare system in the late 1970s, they did not include a universal coverage for social services. Furthermore, in these countries it is considered shameful if a family is incapable of caring for its elderly members<sup>16</sup>.

Finally, the notion of a combined social welfare system raises the issue of shared responsibilities for meeting the needs of the elderly, between state financing, a private sector paid by the clients and assistance provided by an unofficial sector. **Will an improved form of cooperation between services and family**

**assistance ever take place, or will this result in the state cutting aid for family assistance?** The answer depends on ideological and political choices. A number of countries have developed different types of financial aid for family assistance<sup>17</sup> and relief services, such as day care centers or temporary lodging. Finally, home care professionals can help families by providing psychological and consulting assistance.

## Ageing, an enduring past vs. present and future changes

From a "political economy" perspective, old age is the product of social structures and is inseparable from the society in which it was produced. Therefore, the assessment of the demographic changes, resources and living standards of different generations must always be put back in a more general societal context.

The period that began in the 1970s is a time of transition combining changes and persisting characteristics from the past. The principal changes are the shift in the economy in terms of investments in new technologies and the increased international competition. On the other hand, industrial society's persistence in organizing the future path to follow in life - a society where children and adolescents are prepared to enter the workforce and elderly persons are brutally excluded through retirement - demonstrates an enduring characteristic of the past. Upon retiring, individuals lose their social role and identity as well as a sense of direction in the final stages of life. The general improvement of living conditions for the younger group of elderly persons has not eliminated the relation between ageing and economic structure and the social stratifications associated

with gender and social classes. The inequalities observed vary from country to country according to financial redistribution methods between generations. The medicalization of ageing problems is due to the strength of the biomedical model of illness and health and advances in medical technology. Job cuts in the manufactured goods sector raises a series of questions. Can they be replaced by service-oriented jobs (notably in the social sector)? How will they be financed? By users, subsidies or will they be provided directly by the public authorities?

In the health care sector, a development toward a combined social welfare system may be considered, which would include a reorganization of the public sector, an increase in the profit-making private sector and an additional burden for unofficial family assistance. In other words, considering the current state of things, it would mean more constraints for women. We can also apprehend a rationing of health care, which could be based on age. **Differences between countries will depend on the social welfare scheme as well as political choices.** Local initiatives are possible that would improve the quality of the environment of fragile elderly individuals, and would seek better solutions - by refuting medical alternatives - to alleviate the suffering of handicapped persons and provide high-quality care. Consequently, the future health conditions of elderly generations remains the principal unknown factor.

(16) Hugman, 1994

(17) Tax benefits for taxpaying families that care for a handicapped elderly person (France, allowance for family assistance (United Kingdom), payment for their work (Sweden).

# The assessment of gerontology: "life expectancy without disabilities" and the health policy

**Alain Colvez<sup>1</sup>**

Director of Research  
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**W**hat is meant by "Life expectancy without disabilities?"

**Could it become a discerning criteria in health policies? Alain Colvez explains why this indicator is of primary importance in the debate regarding the future of health systems.**

Many professionals are involved in the health system to provide the necessary services to the elderly population. Services in the health sector include : general and specialised medicine, public and private hospitals, outpatient care and hospitalisation. The medico-social sector also includes services known as home care, long-stay home services , long-stay hospitalisation as well as intermediary systems (medium-stay care), etc. Each of these services has its own particular qualities and working methods, therefore evaluation procedures must be adapted accordingly.

For the evaluation of services, three principal concepts must be considered:

- 1- The extent to which pre-defined objectives have been reached.  
It should be noted that an evaluation cannot be made if clear objectives have not been defined.
- 2- The efficiency of resources invested (effectiveness/cost ratio).
- 3- The usefulness of an ethical evaluation : a report on what an individual gains from the service provided.

Every institution and service works towards specific objectives according to the type of work it carries out, duration of stay, optimal use of technical resources, developing its recruitment base. However, it is important to consider the feasibility of defining common objectives.

The notion of "Life expectancy without disabilities" may enable us to develop a general objective which combines all of the actions undertaken for elderly persons.

(1) "Epidemiology of chronic and Ageing" Research Unit ; Montpellier.

## The notion of life expectancy without disabilities

The calculation of this indicator is based on the method of calculation of life expectancy, which is used to determine "the mortality potential" of a population. Life expectancy represents the average number of years a population has lived from a given age (birth, 60 or 65 years) until death. By breaking down the number of years lived into age groups, a new average may be calculated by excluding the number of years lived with a form of disability. The resulting indicator indicates the life expectancy without disabilities (EVSI) of the population.

## Certain methodological problems

If the method of calculation is quite simple, the implementation, as often occurs, may be rather delicate. Life expectancy without disabilities is not an exception, and it entails a number of obstacles.

As purely methodological problems are dealt with by demographers, we shall limit ourselves to strictly conceptual problems. The result of "EVSI" is entirely based on the definition known as "disability." Disability can encom-

pass individuals who are bedridden to persons who are incapable of performing household tasks. This would completely change the results. Therefore, the definition of a state, or states, of disability is determining. It may involve a whole range of indicators, and the tendency today is to generally refer to a "life expectancy in good health", as "life expectancy without disabilities" is one of several of these indicators.

There is also an orientation towards the standardisation of procedures. To do so, there is a tendency to favour the dimensions proposed in the International Classification of Handicaps (deficiencies, disabilities, disadvantages) by the World Health Organisation. They are proposed to measure the consequences of chronic disabling states, ranging from chronic diseases to the biological aging process. A small number of dimensions associated with disadvantages are particularly favoured. There are six such dimensions, which are known as "survival roles." It involves mobility, physical independence, occupations, social integration, economical sufficiency and orientation in space and time. The first three are currently the only ones that can be measured correctly in population surveys.

*The six dimensions proposed by the World Health Organisation for the assessment of "disadvantages"*

- 1- Physical mobility,
- 2- Physical independence,
- 3- Occupations,
- 4- Social integration,
- 5- Economic sufficiency,
- 6- Orientation (time and space).

Over the last ten or twelve years, many countries have made experimental efforts to calculate "Life expectancy without disabilities." However, this type of indicator will probably be calculated more frequently, particularly for elderly persons.

## Possible applications of life expectancy without disabilities

Certainly the most important application of life expectancy in good health or without disabilities is to define objectives for the health system. Considering the proverb promoted by the W.H.O. maintaining that it does not suffice "to add years to life but also life to years," this indicator could be applied in technical, demographic and epidemiological terms. However, the application of this concept does not necessarily depend on measures. In fact, it is very suitable for outlining health objectives in a particular area of focus – "the quality of life."

### *Applications of life expectancy without disabilities*

- 1- Define health objectives,
- 2- Inter-regional evaluations,
- 3- Monitor health developments over the years.

There is a clear interest in making geographical comparisons. As France is currently undergoing a process of decentralisation, inequalities between regions – including those concerning health systems – will undoubtedly be a future concern. Although mortality remains the reference indicator, the

*Life expectancy without disabilities (males) Sample calculations*

Country	year	Life expectancy	Life expectancy without disabilities	Life expectancy EVI
Canada	1978	70,8	59,2	11,6
Québec	1980	70,3	59,0	11,3
France	1982	70,7	61,9	8,8

source : ROBINE and al ?

application of the number of years lived is extremely useful when the population is comprised of a significant number of elderly persons.

The combined developments of life expectancy and life expectancy without disabilities represent a major challenge for the future. If the death rate for elderly persons continues to decrease, experts are still uncertain as to the developments of disabilities within this population.

Three hypotheses have been put forward: "compression of morbidity" for optimists, "pandemic chronic disabling diseases" for pessimists and "equilibrium" for those in the middle.

"Life expectancy without disabilities" must become an essential criteria for defining health policies. This is one of the objectives. It is therefore essential that this indicator be published regularly both in the popular and trade press. Likewise, regular surveys regarding the consequences of chronic states of disabilities in France should be conducted nation-wide.

Whether or not it is explicit, all health systems eventually "ration" health resources. The debate must focus on the determining criteria for the implementation of such rationing. Let us hope that the "Life expectancies" for health is one of the focal points in this ongoing debate.

## BIBLIOGRAPHY

**Sullivan D.F.** A single index of mortality and morbidity. *HSMHA Health reports*, 86, 4, 347-354.

**Fries J.F.** The compression of morbidity : Near or Far? *The Milbank Quarterly*, 1989, 67, 208-232.

**Kramer M.** The Rising Pandemic of mental disorders and associated Chronic Diseases and Disabilities. *Acta Psychiatrica Scandinavica*, 1980, 62, 258(suppl), 382-397.

**Manton K.G.** Changing concepts of Morbidity and Mortality in the Elderly population. *The Milbank Memorial Fund Quarterly/Health and Society*, 1982, 60, 183-244.

**Robine JM, Colvez A.** L'espérance de vie en bonne santé, un indicateur d'avenir pour mesurer l'état de santé des populations. *Rev Epidémiol Santé Publique* 1990;38:373-376.

**Robine J.M., Blanchet M., Dowd J.E.** (Edts) *Espérance de santé. Les Editions INSERM -Analyse et prospective-*, Paris 1992.

**Auteurs multiples.** L'espérance de vie en santé. *Cahiers Québécois de Démographie*, Vol 20, n° 2, Automne 1991.

### Variation of "Life expectancy" and "Life expectancy without disability" at 65 between 1981 - 1991

	1981	1991	Variation
<b>Men</b>			
<b>Life expectancy</b>	14,1	15,7	+1,6
<b>Life expectancy without disabilities (severe)</b>	13,1	14,8	+1,7
<b>Life expectancy without disabilities (all degrees)</b>	8,8	10,1	+1,3
<b>Women</b>			
<b>Life expectancy</b>	18,3	20,1	+1,8
<b>Life expectancy without disabilities (severe)</b>	16,3	18,1	+1,6
<b>Life expectancy without disabilities (all degrees)</b>	9,8	12,1	+2,3

### Sample calculation of life expectancy at 65

Age	Survivor S <sub>x</sub>	Years lived (x,x+5)	Degree of disability	Years lived without disabilities (x,x+5)
65-69	100,000	463,715	0,078	427,545
70-74	85,486	376,533	1,137	324,948
75-79	65,127	266,085	1,143	201,426
80-84	41,307	145,690	0,310	101,906
85-89	17,769	59,025	0,615	22,725
90 et +	5,841	19,043	0,522	9,103

## Viewpoint

# Effective targeting of the Dependency-Specific Service

**Alain Colvez**

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**D**octor Alain Colvez is Director of Research at the INSERM<sup>1</sup>.

**He heads a study group on the implementation of the dependency-specific service (PSD) developed in 1996 by the Ministry of Labour and Social Affairs. In this report, he outlines the areas that will play a role in the successful implementation of the "PSD."**

It is understandable what prompted the Senators to establish a dependency-management law without incurring new costs. However, considering the apparent needs in this area, it will not be easy to convince the interested parties. All of the studies conducted in our country show that there is insufficient coverage of severe dependency by home care services. It is estimated that approximately half of the severely dependent population confined to a bed or chair, do not receive professional assistance.

However, the quantitative aspects of dependency services are not the only ones that count; it is quite possible that the successful implementation of new measures will also depend on qualitative factors. Following the Experimental Dependency Service (PED) trial organised in twelve counties, we now know that it is primarily the reorganisation of gerontology management methods, rather than the existence of a new service, that is the determining element for the success of all new services.

The objectives are quite simple to define. A work group set up in 1996 by the Ministry of Social Affairs<sup>2</sup> considered a general organisation plan for gerontological management. The aim was to elaborate a plan that

(1) "Epidemiology of Chronic Illnesses and Ageing" Research Unit, Montpellier.

would optimise the potential of existing skills in order to provide a new, highly-efficient service in line with those currently offered. A number of counties – in particular those which benefited from the Experimental Dependency Service trial in 1995-96 – have already implemented organisational structures similar to this general plan. Nonetheless, it is important not to minimise other existing obstacles that can stand in the way of a reorganisation that is essentially directed towards co-ordination at all levels: taking charge of the individual as well as financial and professional service-providers.

## The legal framework

From our standpoint, the initial obstacle would be the legal aspect itself. To avoid the use of additional resources, legislation has resolutely been drawn up in a “social welfare” framework (i.e., assistance to the less fortunate). As a result, this perpetuates the deplorable condition whereby the absolute criterion for consideration is revenue before dependency. Unfortunately, this does not cater to the problem. Today, it is not the most unfortunate who have the least coverage; rather, it is individuals with medium revenues, who also represent the majority. Who will they turn to? Certainly not to a hypothetical dependency service market. They will, however, put pressure on authorities to re-define the criteria. And redefined they shall be, undoubtedly just before every election.

It should have been considered that, like illness, dependency is a universal phenomenon that affects the entire population. The implementation of a new type of assistance to better meet the needs of severely dependent elderly persons should not have disregarded

the fact that the state of dependency is part of a continuum. If the question of financing had taken into account the degree of dependency rather than revenue, then a real debate could have been engaged on general solidarity (severe dependency), on possible coverage based on what could be called categorical solidarity (i.e., complementary pension funds), and what could be left to the market (for example, the individual dependency insurance market). Due to the disadvantage it entails, it would have been more logical if financing for severe dependency fell within the principle of general solidarity, like health or disability insurance. This undoubtedly does not apply to early stages of dependency, however they should also be taken into consideration. By taking action early on, we can guard against severe dependency.

## The structuring of the gerontology sector

The second challenge is found in the structuring of the gerontology sector. This is imperative, as it could solve two major difficulties which penalise the current system: the breakdown of services provided into individual operations, and insufficient on-the-field co-ordination of professionals. There are two reasons for this: first, services were added one after the other without being integrated; and second, the separation of the health and social sectors. Consequently, it is extremely difficult for people to find a reliable service to help them deal with their dependency problems, or even obtain the appropriate information. In the absence of co-ordination in the gerontology sector, any new service offered will only add to the jumble of already existing services and will most likely be ineffective.

Perhaps the provision of the new law -

which provides for the implementation of medico-social evaluation teams – will circumvent the obstacle by positioning dependency-specific service legislation within the framework of social welfare. However, this depends on the sole condition that this structuring benefit the whole population, not just the recipients of the new service. Every person and family dealing with dependency must have the right to consultation and an evaluation, followed by the implementation of a well-balanced assistance plan that includes all existing possibilities. Under these conditions, a new service would further complement existing assistance possibilities for the most disadvantaged persons. Moreover, this improved service would benefit the public as a whole.

As the members of the work group set up by the Ministry indicated, such an outcome could be brought about:

- .a) by co-ordinating all institutions concerned in a county;
- .b) by generalising local medico-social teams (on a sub-county level);
- .c) by setting up appropriate systems of information. This last point is important for the effective implementation of an evaluation a posteriori and to do away with the authoritarian and unilateral regulation of budgets based on purely administrative criteria. This will prevent the administration from controlling allocations case-by-case, as it does presently. Such control causes operational delays, takes away responsibility from on-the-field actors, and leads to neglectful tactics which give rise to abuses, inflation and, in the end, provides inadequate services to the targeted population.

(2) “Conditions requises pour assurer l’efficacité des prestations d’aide aux Personnes Âgées Dépendantes”. Report drawn up by the work group headed by Doctor Alain COLVEZ, Director of Research at the INSERM, Paris, May 1997.

## Maintaining existing services

The third challenge we face is maintaining the existing services. It is imperative that all the efforts put forth over the years to improve the quality of services provided – home care services in particular – are not destroyed. Assistance for severely dependent persons requires qualified professionals and supervision. Certain lower-qualified professionals under no specific supervision, are hired as “service vouchers” to do the house cleaning and shopping. Although they are helpful to autonomous persons who have difficulties carrying out household tasks, they cannot meet the needs of severely dependent persons. These people must call on existing services which, in turn, must resolutely focus their activity on severe dependency problems.

Today, our assessment of these points will determine the success of the Dependency Specific Service. Even if we consider the various degrees of dependency – the mildest to the most severe – and reorganise all of the existing assistance services into a coherent whole, the new service will not fulfil its objective in the absence of such a structure.

In order to succeed, the objective must not only be clearly defined, but much political determination is needed to overcome all the obstacles. The operating methods mentioned represent fundamental breaks with current labour practices in this sector. Until now, eligibility for assistance has been limited either to persons with very low-income (who fall within the scope of compulsory welfare), or by pension fund budgets. In any case, the

administrative status of “eligible party” took precedence over dependency, and efforts were not focused on the most severe dependency cases.

The reorganisation of the gerontology sector is a prerequisite for the development of this field of activity. Indeed, the dependency needs of the elderly population call for a considerable amount of work. There are strong hopes for the creation of new jobs through the implementation of dependency-oriented services. From a mathematical standpoint, however, we must guard against the notion that the dependency of elderly persons may translate into a potential pool of jobs. In fact, as a significant portion of such assistance is provided by the family circle, it is not easy to redirect part of this activity to professionals. Doing so depends notably on the pertinence and cost of the service, as well as its ability to meet the needs of individuals with dependencies and their families.

While ensuring the effectiveness of new severe-dependency services, a coherent organisation is likely to encourage the participation of other operators to provide complementary services for all dependent persons, including severe dependency. In consequence, this would help mobilise a potentially important service sector and further ensure the maintenance of the principle of solidarity on which our health system is based. Furthermore, it would facilitate the commitment of private operators – who are afraid of severe dependency – and prevent inequalities in the severe dependency sector.

# The path toward the prevention of ageing

University professor, and doctor,

**Françoise Forette**

heads the gerontology

clinic at Broca Hospital.

Director of the National Foundation

of Gerontology,

President of the International Longevity Centre-France

and expert for the WHO<sup>(1)</sup>,

she is also the author of a book entitled "The Revolution of Longevity."

She explains how a real prevention policy could improve the health conditions of ageing populations

**The Cahiers: Life expectancy in France has been increasing by three months every year for many years now. Just how far can we go? What are the limits of this phenomenon?**

*Prof. Françoise Forette: Honestly, there is no easy answer. For example, by 2050 the Insee forecasts a life expectancy of 90 for women and 82 for men, an increase of 9 to 10 years to the current life span. In relation to the maximum longevity of the human race – which was normally fixed at 120 years, until Jeanne Calment passed away at the age of 122 – there is still quite a wide margin. By 2050, research on fundamental ageing and its genetic determination will continue to advance. On the other hand, everyone knows that the average life expectancy of a population does not only depend on medicine, not by a long way. Socio-economic conditions and hygiene are far more determining. What will they be like by*

*the year 2050? Nobody knows. There may be declines, such as the developments in mortality in ex-USSR countries. Today, no objective element indicates that there will be a stop to the increase in life expectancy. Moreover, recent developments in mortality reinforce the hypotheses made by the Insee in the early 1990s. France should thus expect to see a strong increase in the number of elderly and very elderly persons, rather than anticipate a stop to the increase in life expectancy.*

**The Cahiers: Will this lead to a simultaneous and proportional increase in the number of dependent elderly persons?**

*Prof. Françoise Forette: Currently, there are no factors that indicate such an occurrence. On the contrary, various studies conducted in France and abroad reveal late appearances of a certain number of diseases at a given age. Elderly persons are being placed in institutions much later, and this only concerns a minority of elderly persons 65 and over. Less than 5% are obliged to reside in a hospital or a medically-equipped retirement home. A great majority of persons 65 and over have autonomous lives at home. This reality is often veiled by the public's subconscious assimilation of elderly persons and unwell elderly persons.*

**The Cahiers: You have stated, "age is not the enemy."**

*Prof. Françoise Forette: Precisely. Let us take, as an example, the increasing risk of heart failure as one ages. American researchers at the National Institute on Ageing showed that this is not associated to the actual ageing process, but rather to the appearance of diseases. However, it should not be deduced that fundamental ageing does not exist. In fact, these very researchers also established that the conditions for the endurance of cardiac output varies greatly from 20 to 80 years of age. On the other hand, it should be noted that the more a large number of diseases can be prevented, the more the physiology of the ageing population will resemble that of a relatively young adult, rather than the physiology observed today in elderly or very elderly persons.*

(1) World Health Organization



**The Cahiers: Therefore, you believe that the health conditions of the ageing population could be greatly improved by implementing a real prevention policy.**

*Prof. Françoise Forette: This is indeed the challenge facing a society in which the longevity of old age is equal to, and even exceeds, that of youth. It is not widely known that most of the illnesses that appear primarily among the elderly can undergo preventive treatment. These include cardiovascular or cerebrovascular diseases, dementia, walking or balance disorders, and incontinence or sensory problems. I am not referring to tumours which affect every generation, even if they occur more frequently with age.*

*Let us take, as an example, cerebrovascular neurologic disease. It is widely known that the principal risk factor is high blood pressure. Although it is not the only risk factor, it is the strongest. What have all the major studies conducted over the last thirty years revealed? That the treatment of high blood pressure can help reduce cerebrovascular neurologic disease. A recent "Syst-Eur" study even shows that the treatment of very moderate high blood pressure after the age of 60 decreases cerebrovascular neurologic diseases and cardiovascular diseases by 40% and 30% respectively. The message is thus clear: it is essential to detect and treat even the most moderate signs of high blood pressure in elderly persons.*

**The Cahiers: Now it remains to be introduced in medical practices.**

*Prof. Françoise Forette: You are right. It is not only essential that scientific advances be made in preventive treatments, but they must also be prescribed by doctors and their patients must be receptive to such treatments. Concerning the first point, we must recognise that there is insufficient medical training in geriatrics. Geriatrics is not part of the systematic education within a medical curriculum. Of the twelve medical faculties in Paris, only three have university geriatricians. And only 3% of general practitioners are qualified in geriatrics.*

**The Cahiers: Insufficient medical training in geriatrics probably does not encourage the implementation of preventive measures for elderly persons. However, you must also admit that certain preventive treatments have not been prescribed due to the uncertainty surrounding their harmful effects.**

*Prof. Françoise Forette: I imagine you are referring to the hormonal treatment of menopause to prevent the development of osteoporosis.*

*The initial and legitimate reservations of the medical profession regarding these treatments stemmed from the presumed long-term effects, which were thought to give rise to uterus or breast cancer. Today, we know that the risk of uterus cancer is almost completely eliminated by associating oestrogens with other sexual hormones – progesterone. As regards breast cancer, all studies report a slightly higher relative risk for women undergoing oestrogen therapy. Nonetheless, it should be noted that this risk exists whether or not a patient undergoes hormonal treatment. The advantage of the latter is that it presupposes regular mammographies to check for early signs of these forms of cancer, thus improving the prognosis.*

*Today, the benefit/risk pendulum is swinging in favour of menopause treatment by substitutive oestrogen therapy. However, only 10% of women over 50 undergo hormonal treatment. Fortunately, this proportion climbs to 30% among women who have recently reached the age of menopause. Although these advances are not insignificant, there is much work to be done to raise awareness, particularly that of the general public.*

*However, even when preventive treatments do not carry any risks, their administration is not conclusive. For instance, the preventive treatment of neck fractures with medication (vitamin D and calcium) has proven effective with elderly patients in homes. But isn't the objective to take action before placement in an institution or home? 40 % of persons around 80 who are victim to such fractures must ultimately be placed in an institution because they are incapable*

of regaining their autonomy after such an incident. The mortality rate for these patients is quite high, with 30% who die within a year following the neck fracture.

**The Cahiers: In other words, if there is a cost for prevention, the lack of prevention also has a “price.”**

*Prof. Françoise Forette:* A decrease in the occurrence of certain diseases, or the deferral of their development, have a significant impact on future dependency risks and, of course, on the need for placement in an institution.

However, advances made in the treatment of dementia will also have an impact on the need for beds. About 70% of long-stay hospitalised persons are in hospital for mental deterioration primarily associated with Alzheimer's disease. An estimated 350,000 people suffer from this disease (out of eleven million elderly persons 65 and over). Today there are substitutive treatments (Cognex, Aricept, Exelon) which offset a certain number of symptoms over a number of years, thus deferring placement in an institution. Doctors are increasingly able to detect subjects at risk. Certain medication – which would stop neurofibril degeneration, and no longer simply treat lesions caused by this disease – are currently being tested or being studied. Of course research is slow, however I do believe that significant advances will have been made by the year 2010. Hence there is much to hope for by the year 2050, which you mentioned in the beginning of this interview. But even then, the key will probably lie in the early detection and treatment of the disease. If this goal is attained, then the proportion of long-stay hospital patients could decrease by 70%.

**The Cahiers: From what you are saying, it would seem that you would not favour age being considered as a factor in determining the administration of certain treatments.**


*Prof. Françoise Forette:* Age in itself is not an effective factor in determining the utility of certain treatments! What is determining is the vital and functional prognosis, which can be very bad at 40 and excellent at 80. It all depends on the person and his/her health condition. It is imperative to maintain our approach, which consists of providing care according to an individual's physiological state rather than age. Such is the case in Great Britain, where haemodialysis is not practised in patients over 60.

**The Cahiers: Let us go back to prevention. Your message is quite clear : most of the conditions of our ageing are in our hands.**

*Prof. Françoise Forette:* Absolutely. It is high time to raise public awareness about today's medical realities, do away with obsolete pessimism and make persons over 50 aware of their responsibilities. Many diseases that are less serious, but more frequent, than senile dementia can undergo prevention treatment.

Urinary incontinence – which affects one out of two women at some point in their lives, often after two or three pregnancies – has several causes, most of which can now be treated. Today, 70% of these problems can be treated, but it is important that women talk about them.

Let us take another example: sensory problems, which are extraordinary factors of exclusion. Lengthy exposure of the eyes to the sun increases the risks of cataracts. Even though cataract patients can undergo successful operations – the PNA lens is replaced by an intraocular lens – it is better to be aware of this before. The early detection of hearing loss is also important. Certain diseases such as otosclerosis – an attack of small bones within the ear –



*appear early on and can often be treated by a simple operation. In other cases, the patient is given a prosthesis. The earlier this is done, the more effective it will be.*

*Of course, we must not forget to mention walking disorders, most of which are treatable or require physical therapy. Walking disorders are not caused by aging, but by a specific ailment which must be diagnosed and treated. Yet, it is easy to get used a certain loss of autonomy; we tell ourselves that we are just getting old, when in fact we are often suffering from a disease that can be treated. For example, it is common to see 85-year-old persons who have problems walking. In fact, these persons are suffering from "minor" Parkinson's disease. This requires treatment, even they do not present all of the traditional symptoms.*

# Home care or placement in an institution: making the right choice for persons with dependencies

Marie-Odile SIMON

Social policy evaluation department  
CRÉDOC<sup>1</sup>

**B**eing placed in an institution due to age or health reasons is often an upsetting experience for a number of elderly persons. At the same time home care, an option encouraged by public authorities, conforms to the wishes expressed by the entire population. Home care or placement in an institution are two additional facets that present major challenges in France's social policy agenda.

Dependency is the result of ageing and degenerative adulthood diseases in elderly persons. It can be physical and/or mental and prevent an elderly person from accomplishing a number of essential daily activities alone (getting up, washing up, getting dressed, moving around or eating). A dependent elderly person is often incapable of performing household tasks that would enable him/her to live alone in an ordinary home, such as the upkeep of the house or the preparation of meals.

If a dependent person is unable to seek help, or if his/her health has significantly degraded - the most extreme forms of dependency are found in bedridden persons, who are permanently confined to their beds - then that person can no longer live in his/her home. Two solutions may be considered: placement in a specialized establishment or moving in with relatives, generally one of the children. Today, families usually opt for the first solution. In 1995, 600,000 elderly persons were living in collective homes for the elderly<sup>2</sup>. 94% of its residents were over 65, or 6.4% of persons in this age bracket. This proportion increases according to the age: 13.3% for persons 75 and over, and most persons 95 and over are in an institution.

## The French favor home care

Sometimes elderly persons voluntarily decide to go into a specialized institution, particularly recently retired persons. However, it is almost always a heart-wrenching experience;

(1) Centre de recherche pour l'étude et l'observation des conditions de vie

(2) Martine NEISS, Gilles ROUVERA, «L'hébergement collectif pour personnes âgées, une évolution contrastée entre le public et le privé», SESI, Informations rapides, n°86, February, 1997

elderly persons feel obliged to leave their home because they are incapable of living alone. Upon being admitted, these persons' health has greatly degraded and they are often quite elderly, an age at which it is even more difficult to accept a change in lifestyle. At this stage, being placed in an institution is experienced as a withdrawal from the world, like an «initial death».

According to a study conducted in 1996 by the Research Center for the study and observation of living conditions (CRÉDOC) among retired persons, health appears to be the only concern that even the most recently retired persons have about their future; this is primarily due to the loss of autonomy associated with weakening health conditions. Their principal concerns for the future are as follow:

- to be able to remain in their home (22%);
- to be able to continue their activities (22%);
- not to be alone (20%)<sup>3</sup>.

However, dependency also raises the problem of financial costs. Heavily dependent persons may require 24-hour surveillance or assistance. If such assistance is entirely provided by professionals, the costs are quite high.

### From an experimental dependency service in 1995, to nationwide application in 1997

The state recently felt the need to develop a system to finance the cost of dependency. Previously, it was assumed by the «Third Person Allowance» benefit scheme, established by the Law of June 30, 1975. This allowance, financed by the Regional Council, was designed for handicapped persons. However, at the time, it was not foreseen that it would massively be used to cover the dependency of the elderly.

As a result, this law gradually became inappropriate for assuming dependency costs.

In 1994, in response to the growing concern regarding dependency, and a number of studies which revealed insufficient allowances for dependent persons living at home, the government began considering the establishment of a specific allowance for elderly persons. The objective of this measure was to provide assistance to dependent persons who do not have the means to assume the costs of their situation.

In 1995, 2-year experiments were conducted in twelve departments with the cooperation of the Regional Councils and Pension Funds. The «Experimental Dependency Service» (PED) is only available for dependent persons living at home or with relatives. Elderly persons residing in collective homes or institutions are not eligible.

The CRÉDOC helped evaluate this service, which largely inspired the Law of December 18, 1996 that established a «Specific Dependency Service» (PSD). This service provides an allowance in kind: an assistance plan adapted to the real needs of the elderly person is established by a medico-social team, which systematically visits the dependent person and his/her family at home. An allowance is thus provided either to the elderly person who justifies its use, or directly to the institutions or home care services.

### Very satisfied beneficiaries

Over the last two years, several thousand people have benefited from the experimental service. The majority of applicants are women who are quite elderly; 60% of them are 80 years of age or over, whereas this age bracket only represents less than an third of the persons in the 60 and over age bracket.

The CRÉDOC surveyed 713 beneficiaries of the PED in the twelve departments participating in the experimental phase. The satisfaction of the beneficiaries themselves and

their relatives regarding this service was remarkably high - 92% consider it worthwhile. The beneficiaries surveyed do not feel that the PED has changed their daily lifestyle: only 18% have undergone significant changes and 35% have experienced no change at all. It is perhaps due to this slow transition that the PED has such a high satisfaction rate among the elderly. Considering their age and health conditions, they could not endure seeing their daily lifestyle transformed. They are accustomed to an established daily routine, and are sometimes already familiar with third persons who come to assist them. The PED has by no means the intention of reorganizing, but that of improving and reinforcing the existing allowance system. Consequently, 40% of elderly persons have maintained the same household assistance and have increased the hours of personal attendance.

### Elderly persons surrounded by their families

The beneficiaries of the PED encountered in the framework of this evaluation are surrounded by their family, particularly their children. Often, they themselves are often retired and consecrate a lot of time to their dependent parents, whom they frequently visit: 53% of the beneficiaries surveyed see at least one of their children everyday and 29% once or twice a week. Visits from their children not only keeps them company, but also provides them with household assistance (housework, upkeep, errands) and personal assistance (washing, dressing, help with meals). Moreover, the more the parents become dependent, the more frequent the visits from the children.

(3) Pierre LEQUEAU, «L'action sociale des caisses de retraite», CRÉDOC, July, 1997

The deep involvement of the children is made possible due to their geographic proximity: 15% of the beneficiaries do not have any children who live less than an hour from their home. Children were accustomed to this situation when they stayed at their parents' home or have a home near their parents' home. However it was new to them when, at the first signs of dependency, the elderly persons moved closer to their children, or moved into their home.

## Family members are relieved by professionals

When the dependency of an elderly person becomes too heavy of a burden, the family calls upon the services of a professional. In most cases, professional assistance serves as a supplement to the family's assistance, not the contrary. A number of professionals may thus succeed one another at an elderly person's home.

Such professionals relieve the strain on the family, and it is in this context that the PED gives an allowance to the family. Relieved of some of the burden, family members have some free time to take a breather. This is all the more important, as certain difficult situations last several months, and sometimes even years. However, some family members, particularly spouses, refuse the intervention of professionals. They fear that accepting this type of assistance may be interpreted as a relinquishment on their part. Therefore, it is difficult to put a value on the assistance in kind, unless one considers paying a family member. The strong development of home care services in all sectors and for all age brackets will gradually bridge these psychological gaps.

Nevertheless, professional intervention does not replace that of the family.

Families remain deeply involved; not only do they take on some of the tasks, but they also organize the elderly person's day, including visits from various persons, professionals and volunteers. In particular, assistance to persons with comprehension, orientation or mental disorders require a number of people working in shifts so that the elderly person will have an almost continual presence: a nurse or nurse's aid who stops by in the mornings and evenings to help the elderly person get up and put him/her to bed; a home helper to do the housework and prepare the meals in the morning, and finally the daughter<sup>4</sup> who comes to help her mother eat lunch and who stays with her for part of the afternoon. This is a typical daily routine made possible, in part, by the PED.

## Home care and placement in an institution: two additional facets of the social policy agenda

The social policy implemented for elderly persons - either by the state, local authorities, the National Old Age Insurance Fund (CNAV) or the various pension funds - was above all developed to enable retired individuals who so wish, to remain in their home and live in a familiar environment for as long as possible. Adding to the fact that home care conforms with the wishes expressed by the general public, it has the advantage of being less costly to the public than placement in an institution, at least for persons with light or average dependencies.

We shall not go as far as to employ the term «pool of jobs», however it is conceivable that in the future the entire home care sector will expand quickly to meet the

demands of elderly persons and their families. This is made possible principally thanks to the assistance provided by the «Specific Dependency Service» as well as other existing forms of assistance.

Faced with such a rapidly growing demand, new home care services may emerge that provide assistance with inexperienced or under-qualified staff. Yet, all home care professions that involve a high level of contact require adequate training to meet the specific needs of elderly persons. According to the way the Specific Dependency Service is currently designed, departments have the choice between various statuses for home care professionals: employed directly by elderly persons, possibly through an authorized service, or employed by a service-providing association. In order to cut costs, numerous departments have opted for the first solution, which makes it more difficult to control service quality and damages the level of professionalism the sector aims to achieve. Although a suitable form of assistance enables elderly persons to remain at home longer, there comes a time when the level of dependency is such that the only way to ensure their safety and that they receive the necessary treatment is to place them in an institution. Another facet of France's social policy involves providing these persons with an establishment that is adapted to their needs; a warm, friendly environment that does not completely cut them off from the rest of society.

Therefore, home care and placement in an institution represent two additional aspects of a policy, rather than two different ways to solve the issue of dependency.

(4) cf. infra. «Les enjeux sanitaires et sociaux du vieillissement démographique dans l'Union européenne», Jean-Claude Henrard

## Viewpoint

# Channels, networks and circuits: «Geriatric connections»

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**Professeur des universités,**  
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**Chef de service de gériatrie clinique**  
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**T**he transfer of geriatric patients is one of the current standard practices of hospitals.<sup>1</sup> This is justified if a hospital does not have the resources to care for these types of patients. However, this does not release the establishment from its obligation to ensure that the transfer will provide the patient to with the necessary care, whether it be within the hospital itself or in an outside structure.

For example, a transfer from the Emergency Ward to another department in the hospital implies that this department has the necessary medical staff and expertise; how many hospitals are equipped with a geriatric structure capable of providing such care?

Transfers to outside geriatric structures should not be criticized if this structure has the resources to provide more than just «mid-stay» care: how many geriatric hospitals really have the resources to provide post-Emergency Department care for all patients requiring geriatric attention and care?

Therefore, a geriatric patient admitted into the «Aigu» hospital is transferred either to a non-geriatric unit which is not equipped for such care, or to a geriatric structure equipped for such care, but lacking in staff and resources. Experience shows that it is these types of structures that admit the most serious geriatric patients.

When this 2-speed system is saturated, geriatric

(1) As funds and objects are transferred, so are persons.

patients are transferred elsewhere, in other words, wherever: retirement or convalescent homes which are not equipped to provide health care, or poorly defined medical clinics lacking in resources and geriatric expertise.

What often characterizes this non-geriatric «taking charge» for these unfortunate patients is their purely statutory conception. The patient is not admitted for an illness, but for a type of «stay». According to the rate charged, he is «eligible» for a 20, 40 (20 x 2), 60 or 80-day stay. If the patient is cured, he will stay for the remainder of this period. If the patient is not cured by the designated date, he is discharged. For example, an invalid patient will be taken to his home alone on a Friday night. Or a more conscientious social worker will attempt to urgently transfer a patient to a geriatric unit, not so that the illness may finally be cured, but because the designated stay is finished.

After being admitted into a hospital, the geriatric patient will be transferred to a unit - which may or may not be specialized - according to the most apparent symptom, often unrelated to the «true» principal diagnostic. The patient is soon considered to be a social case that «burdens» the unit, especially if he becomes bedridden. The sole objective is expulsion, that he be sent elsewhere - to his home, a retirement home, a geriatric unit — whether it be close by or 50 or 80 km away, what counts is that unit be cleared of its burden. Through faxes, a zealous social worker thus sends a patient wherever possible. Often, geriatricians «cooperate» (reference to 1943) in these actions. They pick and choose as if they were shopping,

and select the least difficult case - the least geriatric - thus going against their competence. What else can be done? Those who accept to take in the most chronic patients, the most handicapped, the elderly who truly need hospital care, they are the ones who everyone will point their finger at: they are more costly than the average geriatric patient, even if it is much more cost-efficient than the expelling unit (rather than the sending one).

If individuals live to an elderly age it is because they were solid; this type of patient often gets well or recovers sufficiently. But sometimes not sufficiently enough to be sent home, enough however, to be sent to a retirement home. This patient will have to wait (first at the expense of the Health Insurance, then partly at the expense of Social Security) for the Regional Council to determine who will assume the costs (often Social Security itself). This wait could last one month, a quarter, a semester, or more. Even if the desired space is available in the selected establishment, the patient must continue to wait at great expense. When the Commission finally makes its decision, how does one transfer a patient who has already settled in? Families do not say a word; many of them receive and acquire the resources of the patient as long as he is in Intensive or Mid-Stay care. They do not contest unless they are required to pay for accommodations when the patient is sent to Long Stay Care or a Retirement Home. The elderly patient is thus retransferred back home by his family, even if they are incapable of taking charge of him.

Geriatric patients are all too familiar with this apocalyptic scene. They

also know that there are solutions ; there are many examples in France (even in Paris) and they know that these solutions save money. Isn't it time to speak out and refuse to take part in the tragi-comedy of channels, sectors, pools, networks, circuits and other «geriatric connections» that ignore the patient? I know this no longer shocks Social Security, which wastes public contributions in this manner, nor directors who thus conserve more beds, nor elector-conscious boards of directors, nor nurses or doctors, who themselves are active players in this wild goose chase.

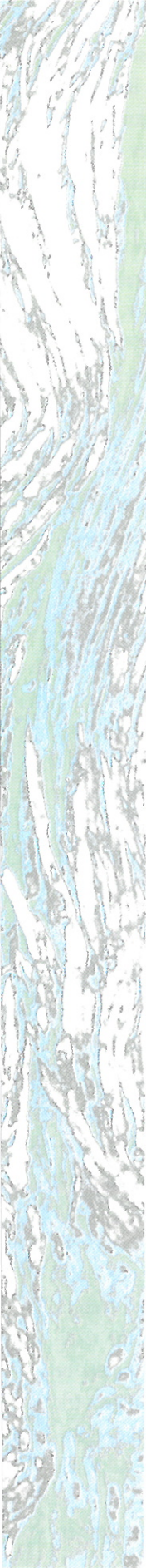
As for geriatricians, they champ at the bit by continuing to mother bedridden patients, many of whom should never have become bedridden.

Doesn't anyone see an ethical problem with this? So many patients «lose their chance», develop nosocomial pathologies because they are transferred from the Emergency Department to inappropriate structures, or are sent where they should be cared for - a Geriatric Unit - too late.

Perhaps one day generalists will demand appropriate care for their geriatric patients; families will complain about outrageous transfers or abandonment; hospitals will be interested in the future of the patients who are sent to them, or will no longer retain patients when their units are empty; geriatricians will demand that certain ethics be respected (i.e., that the transfer of a patient be a joint medical decision between doctors, the transferring unit and the receiving unit); directors will finally be concerned about the lack of geriatric resources which implicate the organization of the establishment... Surely one day, but when?

Perhaps also one day protection ser-





vices will actually play their role: will Medical Insurance demand a true accreditation to do away with phony establishments and enforce an equal type of care ?

Perhaps there will no longer be noble illnesses, those we hear about in the media; for which there are too many to count and vulgar diseases which should be scorned. Will patients come back in full view (and not hidden «in the heart of our action»)? Then perhaps we shall no longer see «charters» deporting elderly Parisians to the Oise or Essonne departments, or elderly persons from the Meuse to the Champagne region, etc.

One day, regional councils will cease incurring the high costs of leaving elderly persons waiting in hospitals for semesters on end at the decision-making whims of a bureaucratic council.

Yet, so many savings could be generated by finally turning our interests to geriatric patients: less Short Stay beds, much less Mid-Stay beds, much less Long Stay care beds.

The investment required is modest: from geriatrician positions in hospitals (and university geriatricians) necessary to allow for appropriate medical care, treatment and transfer decisions, to a geriatric presence from the time of admittance into a hospital, and even prior, to offer general medicine.

Anyway, that would be a drop of water, whereas the sole development of «uphill» geriatrics would truly allow for making up beds everywhere and ceasing today's outrageous «transfers». However, everything that needs to be done has already been described by our hospital management, but it seems that writing and doing are separated by an ever-widening gap.



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118**

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Etranger : 410 F**

### LES PAYSAGES D'ILE-DE-FRANCE

PAYSAGE, PAYSAGES

#### COMPRENDRE

PAYSAGES PERÇUS, PAYSAGES RÉVÉS,  
PAYSAGES VÉCUS  
L'HISTOIRE DES PAYSAGES D'ILE-DE-FRANCE  
LA COMPOSITION DES PAYSAGES D'ILE-DE-FRANCE  
L'ÉVOLUTION RÉCENTE DES PAYSAGES  
D'ILE-DE-FRANCE  
LES POLITIQUES DU PAYSAGE EN ILE-DE-FRANCE

#### AGIR

COMPOSER AVEC LE PAYSAGE  
COMPOSER LA VILLE  
TISSER LA VILLE SUR LA VILLE  
RÉHABILITER LES QUARTIERS  
COMPOSER LES FRANGES URBAINES  
REQUALIFIER LES VOIES DE COMMUNICATION  
ET LES ENTRÉES DE VILLE  
COMPOSER LES INFRASTRUCTURES LINÉAIRES  
TIRER PARTI DU RELIEF ET DES VUES  
PRÉSERVER ET GÉRER LE PAYSAGE RURAL  
RECOMPOSER LES ESPACES OUVERTS

#### COMPOSER

ACTIONS, ACTEURS, OUTILS  
NOUVELLES APPROCHES, NOUVEAUX PROJETS

BRÈVES RENCONTRES  
BIBLIO BRÈVES  
RÉFÉRENCES ILE-DE-FRANCE  
2<sup>e</sup> TRIMESTRE 1997



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### TROIS SIÈCLES DE CARTOGRAPHIE EN ILE-DE-FRANCE

TRACES ET TRACÉS

TROIS SIÈCLES DE CARTOGRAPHIE  
EN ILE-DE-FRANCE

LES LIMITES ADMINISTRATIVES EN ILE-DE-FRANCE

STRATIFICATION DE CARTES ET AMÉNAGEMENT

Emprise des grandes cartes en Ile-de-France  
du XVIII<sup>e</sup> au XX<sup>e</sup> siècle  
La carte topographique des environs de Versailles  
dite carte «des Chasses»  
La carte de France dite carte «d'État Major»  
La carte de France type 1900  
La carte de France type 1922  
Le virage des Trente Glorieuses :  
de la «région parisienne» à l'Ile-de-France  
250 ans d'évolution de l'occupation du sol  
en Ile-de-France  
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Les bases de données de l'IGN

LE CADASTRE, LA PARCELLE ET LA LIMITE  
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L'URBANISTE DANS SON TEMPS

RÉFÉRENCES ILE-DE-FRANCE  
4<sup>e</sup> TRIMESTRE 1997



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### TROIS SIÈCLES DE CARTOGRAPHIE EN ILE-DE-FRANCE

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