

# The UK 'at risk'

## A corpus approach to social change 1785-2009

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# Introduction

- ‚Risk‘ has become pervasive in Western industrialised societies such as the UK after WWII (Medicine: Skolbekken 1995; Social Theory: Beck 1992).
- A range of sociological theories provide different explanations:
  - *Risk society theory* (Beck, Giddens): New social mega risks and detraditionalization processes. Shift from external to humanly produced risks.
  - *Governmentality* (Foucault, Dean, Rose, O’Malley and others): risk knowledge and norms of self-improvement combine in the governing of populations.
  - *Cultural theory* (Douglas, Wildavsky and others) advancement of big business and top-down regulation mobilises egalitarian milieus.
- Explanations base on scholarly observations or case studies.
- Difficulties to examine broader social changes across social domains and historical time.



# Introduction

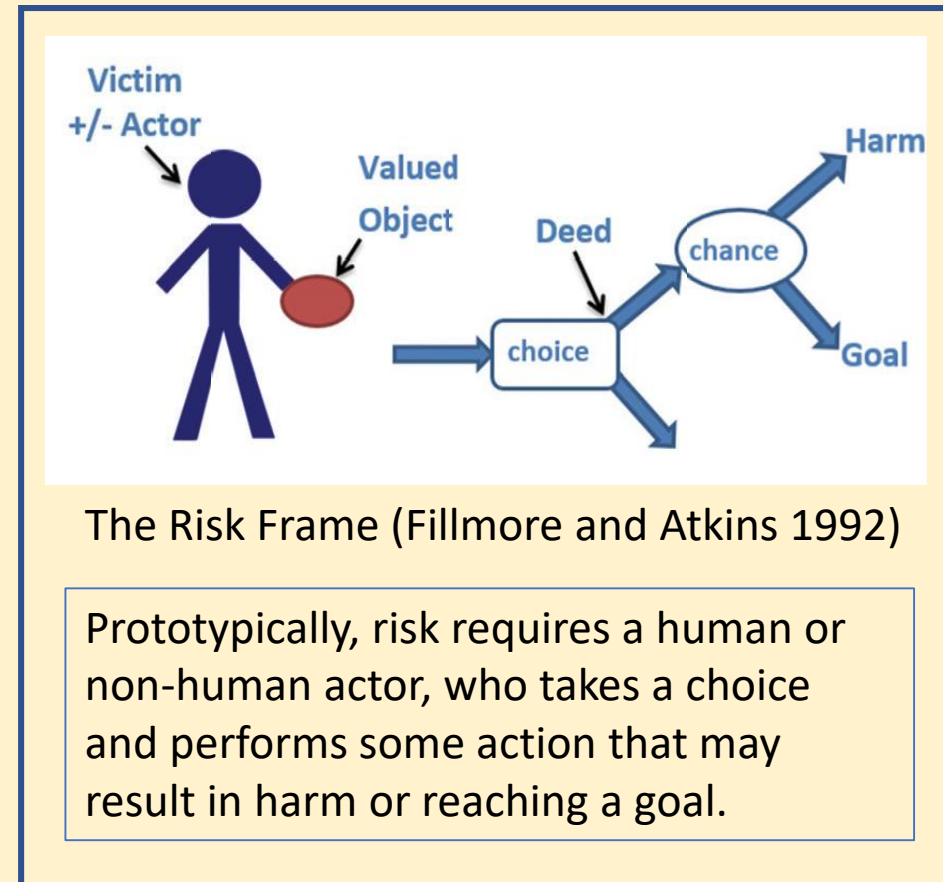
- Language and the social are inseparably connected (e.g. Berger & Luckmann 1969; Fairclough 1992; Halliday 1978).
- Research Question: Which social developments manifest in the proliferation of 'risk words' (here 'at risk' constructs) in the news media?
- Digitised newspapers – even in the times of social media – are a good source for a case of the connection between social change and language change.

<sup>1</sup>Risk words are defined as any lexical item whose root is risk (risking, risky, riskers, etc.) or any adjective or adverb containing this root (e.g. at-risk, risk-laden, no-risk; Zinn & McDonald, 2018: 70).

# Risk Semantic and Risk Words

- Risk semantic might have other expressions than risk words<sup>1</sup> such as danger, threat .....
- There is good evidence that:
  - ‚Risk‘ has a particular meaning (in contrast to threat: war, terrorism)
  - Its usage significantly increased after WWII.
- ‚Risk words‘ as nodes of meaning which may differ depending on context and time.

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# Risk-words as Research Object

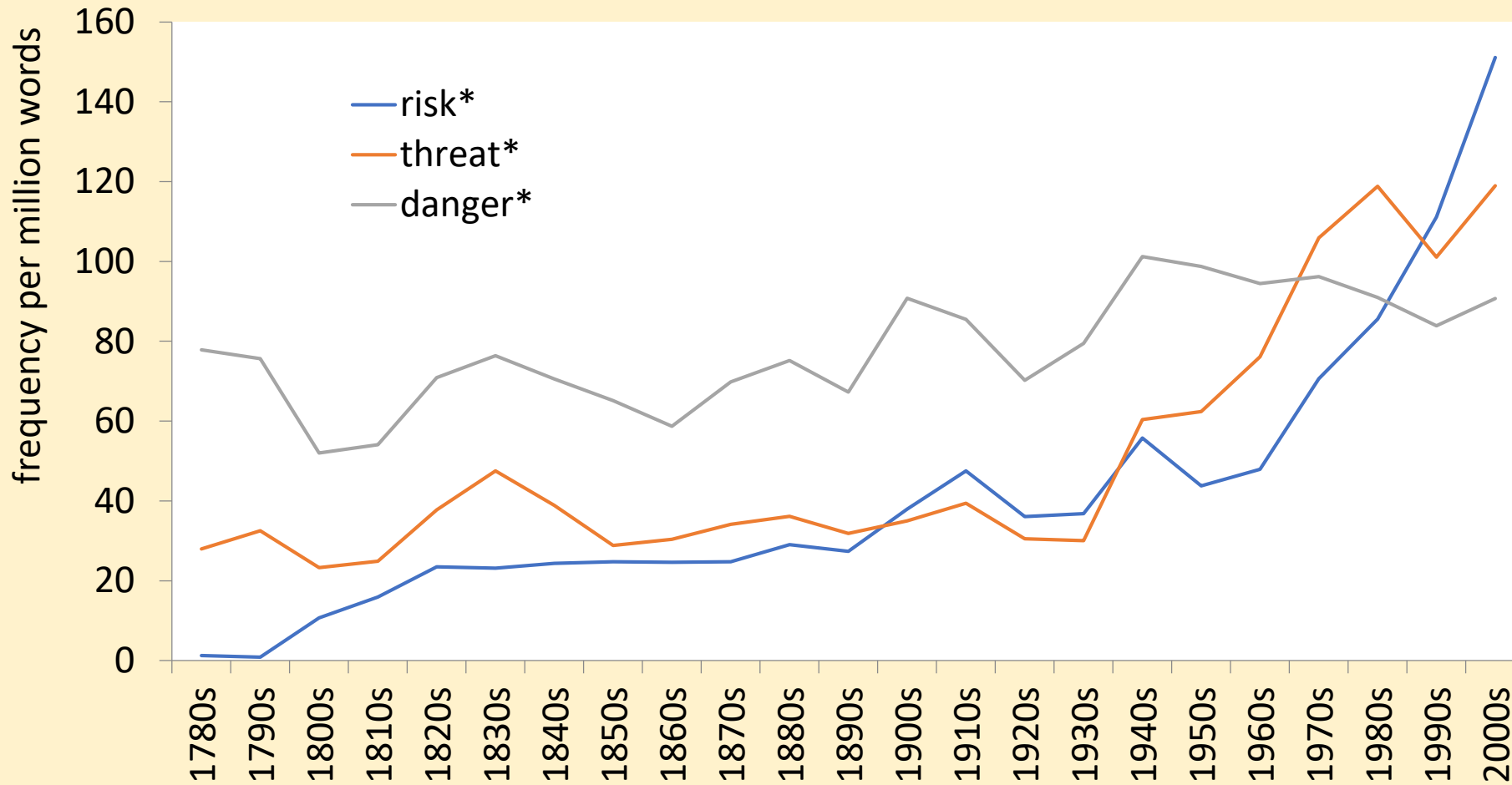


Figure: 'Risk', 'Threat' and 'Danger' in *The Times* (London) 1785-2009

# The Proliferation of *At-Risk-Constructs*

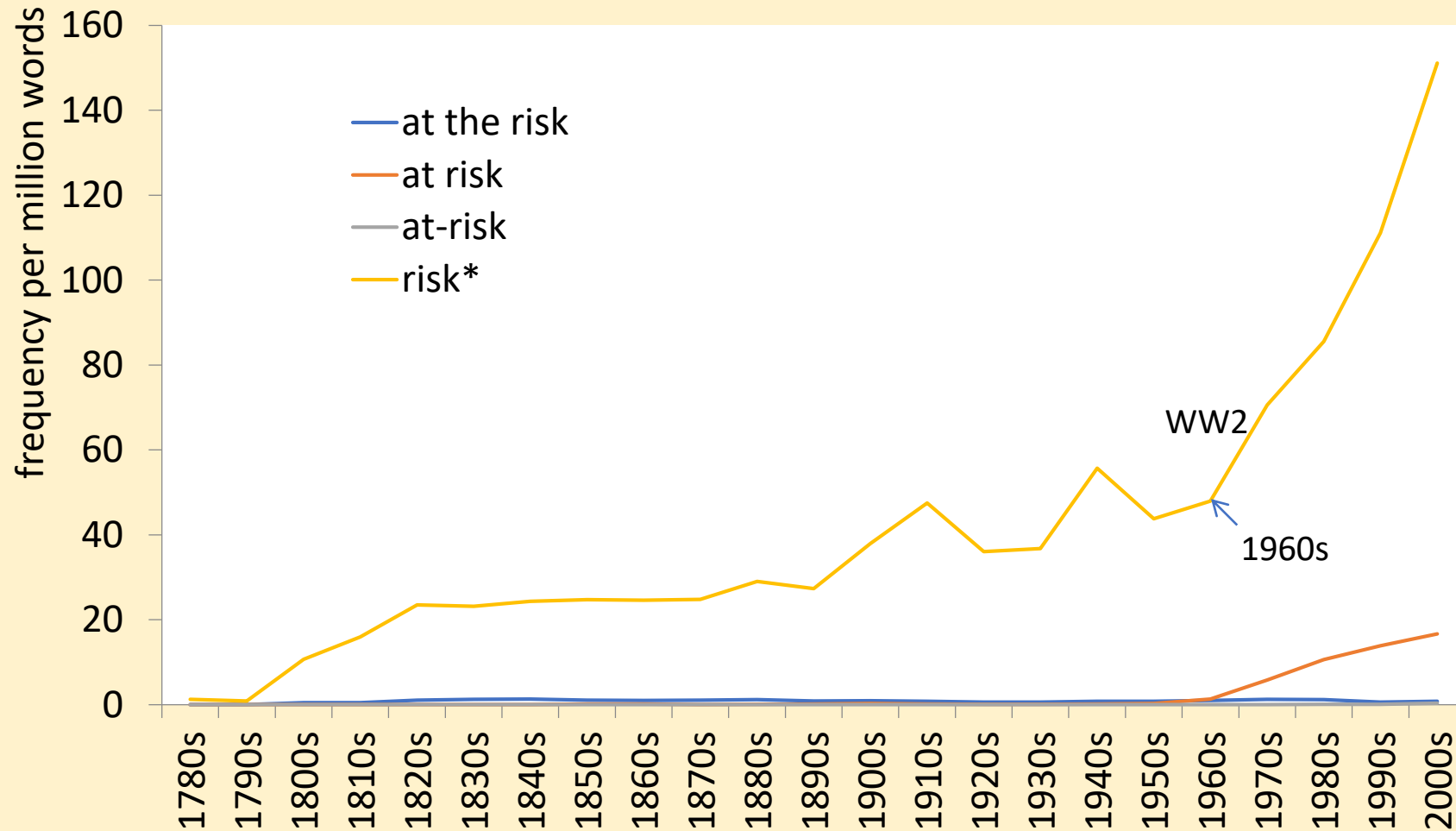
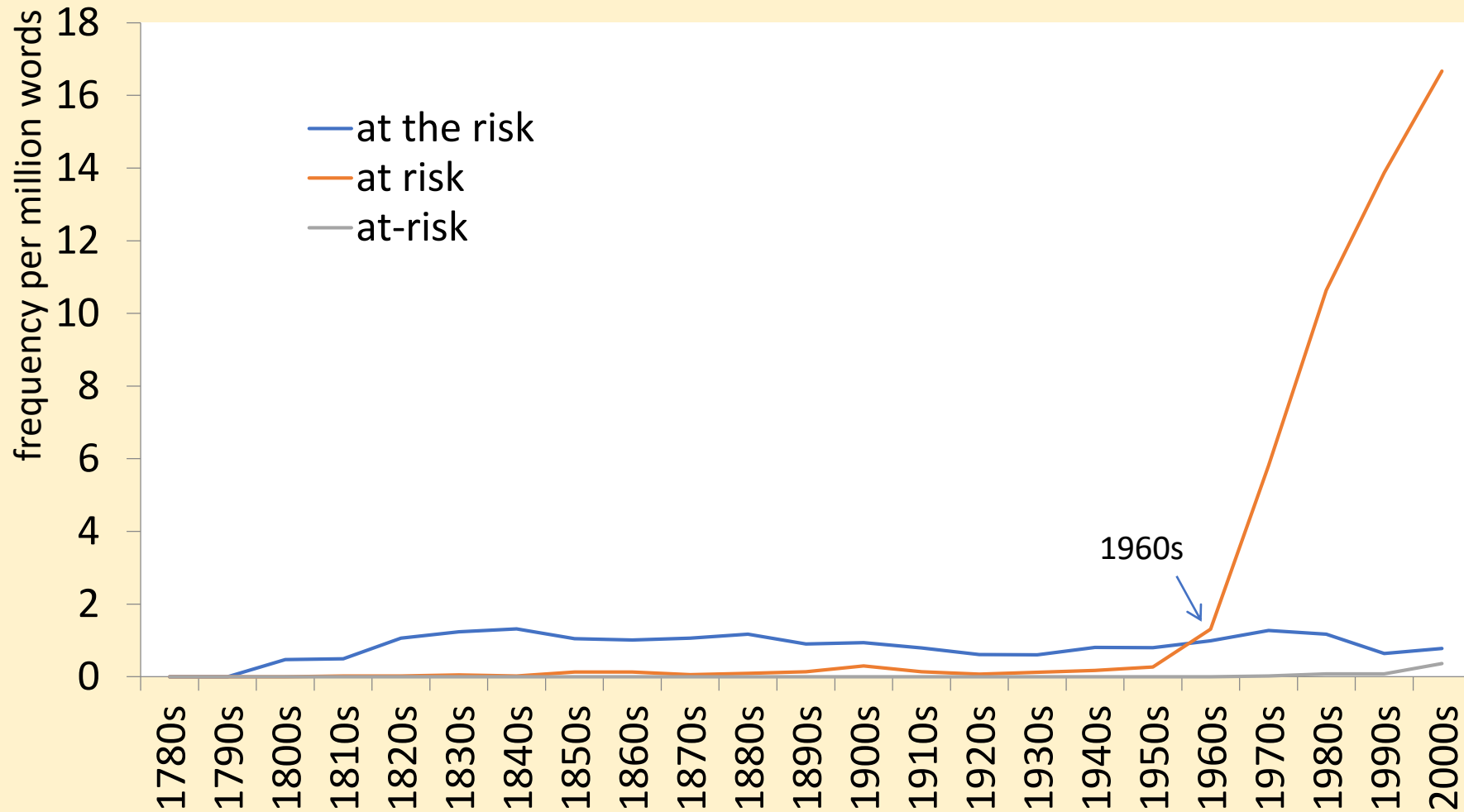


Figure: Number of Risk Words in *The Times* (London), 1785-2009

# The Proliferation of *At-Risk-Constructs*



'At/Risk' Constructs in *The Times* (London), 1785-2009

# Proliferation of *at Risk*

- Three most frequent combination of 'at' and 'risk':

1900s	2000s
'at the risk' (34%)	'at risk' (74.3%)
'at risk' (10.35%)	'at the risk' (4.41%)
'at their own risk' (5.63%)	'at owner's risk' (2.74%)

- Homogenisation of the diversity of expressions combining 'at' with 'risk'.



# Methods

- CQPweb at CASS, Lancaster University
- Collocations, concordances, word lists etc.
  - Examining the **co-text of risk words** (+/-) **five words** before/after a risk word.
- Collocations (Sinclair 1991, Baker 2006): co-occurrence of words.
- YOUNG people are experimenting with sex and drugs at an earlier age than before, putting their **health and even their lives at risk, the Government's Chief Medical Officer** said yesterday." (1994\_09\_22).
- LL (log likelihood) measure focuses on the statistical confidence that the co-occurrence of two words is not random (Evert 2005, 2009).
- The collocations are sorted from the highest to lowest confidence. (emphasise of high frequency words)

- Corpus of all articles of *The Times* (London) 1785-2009
  - Corpus contains:
    - 10.049.225.983 words
    - 519.184 „risk“-words
    - 31.645 „at risk“
    - 8.950 „at the risk“
    - 395 „at-risk“.

# *At risk of what?*

1950s	1960s	1970s	1980s	1990s	2000s
War	War	Battering	Disease	Disease	Flooding
Conflict	Disaster	Injury	Aids	Cancer	Disease
Loss		Pregnancy	Infection	Heart	Heart
Disaster		Disease	Abuse	Infection	Cancer
Inflation		Inflation	Cancer	Starvation	Harm
		Violence	Starvation	Death	Attack
		Heart	Heart	BSE	Abuse
			Extinction	Flooding	Diabetes
			Injury	Extinction	Extinction
			Death	Attack	Infection

# Post-war Concerns 1950s-1960s

- The numbers of *at risk*-collocates in the 1950s and 1960s are very small.
- During the 1950s and 1960s it is mainly about *war* in the context of the *cold war* tensions between the East and the West (Gaddis 1987; McMahon 2003) that escalated during the 1950s and 1960s
- E.g. the Cuba crisis in 1962

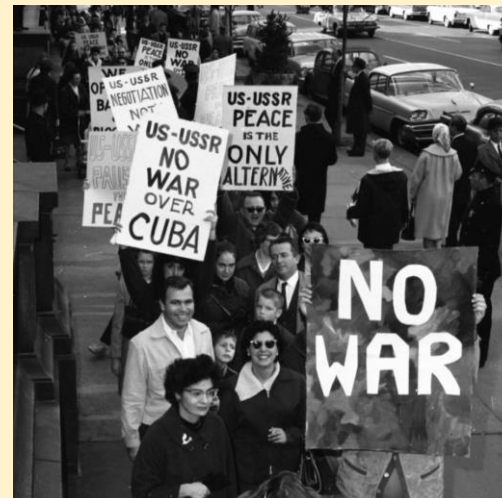
1950s	1960s
War	War
Conflict	Disaster
Loss	
Disaster	
Inflation	



Action against the latter could be taken only **at great risk** of nuclear war, but a bomb on a U2 base after a provocative flight would catch the Americans red-handed and wrong-footed. (1960\_07\_04)

He had emphatically supported an armed blockade of Cuba and equally emphatically opposed an invasion of Cuba **at the risk** of world war until the United Nations peace-keeping machinery had been used. (1962\_12\_06)

Nor are we prepared to accept that he has the right to topple another middle Eastern nation **at the risk** of a third world war! Why do they not rush to the aid of the people of Czechoslovakia? (1968\_08\_26)



# From Battering to Abuse

- Long reality of child abuse ignored or downplayed by the media.
- Late medical (discovery) of child battering in the 20<sup>th</sup> century.
- *The Battered Child Syndrome*, published by Kempe et al. (1962) in the US and Griffiths and Moynihan's (1963) *battered baby syndrome*.
- In the UK the *National Society for the Prevention of Cruelty against Children* (founded 1884) set up a research unit that between 1969 and 1973.
- Shift from the medical: at risk of 'battering' to the broader social concept of 'abuse'.



**Figure 11.** Osteogenesis imperfecta. Skeletal survey in this newborn infant. **A.** shows multiple fractured bones which are unusually dense. The left upper extremity is shown. An epiphyseal-metaphyseal fracture is seen in the proximal humerus. The olecranon is fractured. A healing fracture is present in the shaft of the radius. **B.** Osteogenesis imperfecta in a 5-year-old girl. A malaligned healing fracture of the right humerus is seen. Osteoporosis and thin cortices are evident.

- The important thing with mothers **at risk of battering** is that they should be recognized early perhaps even before they are aware of their own feelings. (1973\_11\_14)
- Babies **at risk of battering** by their parents are not being given enough protection by the social services, a Royal Society of Health ... (1975\_02\_28)
- He [Health Minister] undertook to re-examine the case for giving social workers the power to have a medical examination earned out on a child **at risk of abuse**. (1988\_04\_30)
- "Telephone helplines act as a listening ear for people with emotional problems, children **at risk of abuse**, women suffering domestic violence." (1989\_07\_27)

# At risk of Illness

- A large body of discourse on risk relates to health and illness (Zinn and McDonald 2016, 2018; Hardy and Colombini 2011).
- Heart diseases are by far the most frequent issue: Heart related illnesses (f=155) followed by cancer (f=62), diabetes (f=26) and Aids (f=23).
- People (f=133), women (f=79) and children (f=48) and finally men (f=40).
- Direct link to scientific expertise, research or a study (f=46).
- General shift of social health concerns from infectious diseases to chronic and civilisation diseases (e.g. Kurylowicz and Kopczynski 1986).

1970s	1980s	1990s	2000s
Battering	Disease	Disease	Flooding
Injury	Aids	Cancer	Disease
Pregnancy	Infection	Heart	Heart
Disease	Abuse	Infection	Cancer
Inflation	Cancer	Starvation	Harm
Violence	Starvation	Death	Attack
Heart	Heart	BSE	Abuse
	Extinction	Flooding	Diabetes
	Injury	Extinction	Extinction
	Death	Attack	Infection

- The study, involving 13,000 women, shows tamoxifen could cut cancer rates by nearly 50 per cent among those considered vulnerable. Researchers focused on women **at risk of** getting breast cancer either because of a family history, precancerous breast lesions, or age. (1998\_04\_06)
- According to microbiologists, every time we use the lavatory we put ourselves **at risk of** infection. Bugs and bacteria thrive in unspeakable ceramic places. The bathroom is a hypochondriac 's nightmare. (1992\_10\_02)
- Kapila said ethical difficulties could be overcome. He added: "All the evidence suggests that the people most **at risk of** Aids do not volunteer for testing. (1988\_11\_12)





# At risk of starvation

- People *at risk of starvation* is mainly reported in relation to Africa.
- Famines in Ethiopia (1980s), North Korea, the Iraq, and the Soviet Union (1990s), stronger focus on Kenya, Zimbabwe and Afghanistan in the 2000s.
- In later decades articles more frequently establish a link to war, mismanagement and corruption.
- Notion of risk are less mathematical than based on expert judgement by organisations (or experts) who are considered having expertise in the domain such as the UN or Oxfam.

- Mr Tadros Hagos ... is seeking a two-year commitment to feed 2.5 million of the 3.8 million people **at risk of starvation** in the province and begin an ambitious programme of development work designed to lead to self-sufficiency by 1987. (1985\_02\_27)
- ... food have been sent to Somalia this year, about a third of the country 's six million people remain **at risk of starvation**. About 300,000 people have died and almost half the grain shipped to Somalia has been looted by bandits ... (1992\_12\_09)
- We are travelling with Oxfam to witness what needs to be done to help some 13 million people **at risk of starvation** from this year 's drought - part of a wide-spread famine which has remained largely invisible. (2000\_08\_19)

# The Environment: Extinction

- Since the 1980s: large variety of species (animals & plants) being *at risk* of *extinction* at far-away places and local.
- Reference to reports, statements of experts reporting worldwide developments (NGOs pushing the agenda).
- Humanity is responsible: life style, excessive fishing, habitat destruction, illegal hunting etc.
- Claims are almost always linked to empirical data or evidence supported by a concrete number or percentage of affected species or the indication of specific factors which are responsible for the expected loss.



- ... the most drastic falls in numbers, with 56 per cent of 252 endemic freshwater Mediterranean fish **at risk of extinction**. Mark Wright, science adviser for the WWF, said ... (2006\_05\_01)
- The species, usually found in the seas off Indonesia, is **at risk of extinction**, as about 20 million are caught each year to be dried out and used in Chinese medicines. (2002\_08\_22)
- Leatherback turtles **at risk of extinction** THE leatherback turtle is heading for extinction, according to research showing a collapse in numbers ... (1996\_09\_03)
- The method could also be of help for zoologists engaged in conservation of wildlife **at risk of extinction**. Studies at the Institute of Animal Physiology at Cambridge were conducted ... (1986\_04\_09)xx

# The Environment: Flooding

- 2000s: Flash floods caused severe damage in Scotland and Cumbria.
- Debate linked to climate change, but central are financial issues related to house value and insurance cover.
- Key players: Environment Agency and the Association of British Insurers.
- Key issues: accurate maps of *at risk*-areas and the social and financial impact of such maps.
- Risk: scientific approach and debates about social responses. Determining the risks objectively and encourage individual precaution and insurance.
- With the concrete experience of repeating flooding, it has become a pressing issue which requires social responses (insurance, flooding maps, regulations).



- A recent report from the Association of British Insurers reveals that between 950,000 and 1.2 million homes in the UK are **at risk of inland flooding**, at a potential cost of some 35 billion.
- THE Environment Agency faces a humiliating court battle after being accused of providing inaccurate and alarmist data on flood risks to businesses and homeowners. The agency has designated hundreds of square miles of England and Wales as **at risk of flooding**, driving away investment and hitting property prices. (2002\_05\_14)
- More than five million Britons live or work in areas **at risk of flooding**, the Association of British Insurers (ABI) has said, .... (2005\_04\_16)
- ... There are an estimated 1.8m homes in England and Wales **at risk of flooding**. By the year 2075 flooding could be costing an extra bn a year. The Environment Agency ... (2007\_07\_03)



# At Risk of Pregnancy

- End 1960s: fundamental change in public attitudes to sex and family planning (Leathard 1980; Weeks 1981, 2017).
- 1967: Family Planning Act made contraception available through the NHS.
- Early 1970s: Debate about unwanted pregnancy and effective birth control – need to educate young women about most reliable forms of birth control
- Reduce costs of illegitimate children and abortion.
- Risk comes with empirical data.



- ... ensure that the facilities were used and change the present situation where only just over half the eight million women **at risk of pregnancy** use any form of effective birth control. Mr Alastair Service, chairman of the Campaign, said yesterday (1972\_03\_17)
- The survey found that 93 per cent of all married women **at risk of pregnancy** used some form of contraception, but 30 per cent used the least reliable methods such as (1973\_07\_19)
- "But we cannot escape the fact that some young people are sexually active and **at risk of pregnancy** from an early age he said. In 1976 27,104 abortions and 19,800 illegitimate live births ... (1978\_04\_15)

# At Risk of - Summary

- The at-risk-construct describes the quality of a thing or situation.
- It mainly occurs in the context of expert judgement or concrete research.
- In the 1950s-1960s concerns about war and the danger of another war instantiate the risk semantic.
- Later, health issues dominate while other issues affecting entities of central social value such as pregnancy and housing turn up as well when referring to experts/research.
- Institutional practices such as lists of endangered species at risk of extinction.

# Objects *at Risk* Noun Collocates in *The Times* (London), 1900 to 2009 (sorted by LL)

1900s	1910s	1920s	1930s	1940s	1950s	1960s	1970s	1980s	1990s	2000s
freight	amount	amount	amount	amount	capital	sums	jobs	jobs	jobs	jobs
amount	value	sums	sum	values	population	population	children	lives	lives	lives
cargo	amounts	sum	population	amounts	values	lives	lives	children	children	children
amounts	property		sums		sums	money	people	people	patients	patients
value	sums		amounts		amount	life	patients	patients	buildings	people
property	freight		value			people	workers	babies	people	home
interests	capital		property			amount	child	women	safety	health
						capital	babies	safety	women	buildings
						women	future	child	life	safety
						mothers	life	health	health	homes

# Objects 'at Risk' Noun Collocates 1900s – 1950s

## Economic issues and seaborne trades

- Related to seaborne trades (freight, cargo).
- Economic issues (amount, property, capital, sums, money etc.)

Examples 1950s:

- There was private capital which was not **at risk** but which had a guaranteed, reasonable rate of income in a corporation which was the result of the policy ... (1950\_11\_01).
- In this way the amount which the discount-market has **at risk** has risen by a relatively substantial figure. (1951\_03\_01).
- ... a matter of a little over 3 per cent net on the total capital and reserves **at risk**. (1954\_05\_17).
- ... amounting to 515,341, were appreciably below those of the previous year, in spite of a larger sum at risk (1955\_04\_28).
- The grower, with crops of high value at risk, seeks ease of mind by pay- ing a premium upon an insurance policy. (1957\_03\_25).

# Objects 'at Risk' Noun Collocates 1900s – 1950s

## The rise of Epidemiology

- Development and institutionalisation of epidemiology as a discipline.
- Epidemiological reasoning in public debate.
- The expression '**at risk population**' in the early 20th century is mainly bound to the context of research, a scientific report and as part of a measure or calculation.

1930s	1940s	1950s	1960s	1970s
amount	amount	capital	sums	jobs
sum	values	population	population	children
population	amounts	values	lives	lives
sums		sums	money	people
amounts		amount	life	patients

### Examples 1950s:

- It is impossible to estimate how many more cases will be notified, but as the polluted supply was geographically limited and the population at risk was no more than one-twentieth of the total population of the borough, it is not anticipated that they will be numerous. (1937\_11\_13)
- This total of 15 in six years seven months, with an average population at risk in the neighbourhood of 6,000, gives an annual suicide rate of 38.0 a 100,000 living Oxford University students. (1953\_09\_05)
- The impression that ulcers occur more often in young men is due to a failure to take into account the relative size of the population at risk. (1957\_05\_10)

# Objects 'at Risk' Noun Collocates 1900s – 1950s

## The rise of Epidemiology

- 1970s: the expression '**at risk population**' started to spread to other contexts such as crime, war, financial fatigue, and the safety of women.
- late 1980s: **hunger** and **starvation** of people in the Global South.
- 1990s: **animal populations** at risk of extinction (bears in Poland or ladybirds in the UK).
- 2006 the first article uses the concept when reporting on **global warming**.

Construct 'population at risk' introduced in a specialized technical scientific context, over time becomes part of the socio-cultural knowledge and is therefore routinely used without mention underpinning mathematical calculation.

# Jobs 'at risk' in the working society

- With the mid 1970s the end of the *golden age* of Welfare Capitalism (Esping-Andersen 1996) **work and employment 'at risk'** has become a key feature.
- 'Jobs' the most frequent collocates from the 1970s to 2009 (1970s: f=135 [10.16 words per thousand in the collocate window left 5 to left 1 before the node], 1980s: f=356 [12.95/k], 1990s: f=381 [10.80/k], 2000s: f=430 [8.16/k]).

- Keywords:
  - 1970s: 'productivity', 'inflation' and 'tax' (compared to all articles of the decade).
  - 1980s: 'union', 'industry', 'coal', 'strike', 'dispute', 'worker', 'minor', 'labour', 'redundancy', 'trade' and 'closure' etc. while the key actors in the debates are 'government', 'industry', 'labour' and 'Union(s)'. (*The great minors strike 1984*)
  - 1980s/1990s: 'strike' and 'dispute' decreases and disappears; 'losses', 'redundancies' and 'cuts' become more frequent.
  - 2000s: 'million', 'billion', 'group', 'company', 'sales', 'profits', 'business', 'retailer', 'chain', 'operator', 'cuts' and 'staff' more frequent.
- Shift from conflicts between Government, unions and companies to companies acting in the global economy.

# We and others put **lives** at risk unreasonably while professionals must safe us

- Since the 1960s: 'lives' is one of the most frequent 'at risk' collocates (1970s: f=63 [4.74/k], 1980s: f=196 [7.13/k], 1990s: f=280 [7.94/k], 2000s: f=465 [8.83/k]).
- 'Lives' prototypically stands for the seriousness of an 'at risk'-situation:
  1. people unreasonably put their own lives at risk or
  2. other people or particular circumstances expose people unreasonably to risk.

## Examples:

- YOUNG people are experimenting with sex and drugs at an earlier age than before, putting their health and even their lives **at risk**, the Government's Chief Medical Officer said yesterday." (1994\_09\_22).
- "Members of the Royal Family, successive prime ministers and the world 's most famous entertainers have had their lives put **at risk** by the BBC failing to deal with the threat of potentially lethal asbestos dust, it was claimed last night" (1988\_09\_14).
- "The move comes after a series of cases in which patients have been killed, or had their lives put **at risk** by doctors protected by the medical profession" (2000\_06\_02).
- "Tens of thousands of children are placing their lives **at risk** by not learning to swim properly" (2003\_08\_01).



# We and others put **lives** at risk unreasonably while professionals must safe us

- Reporting on professional risk-takers who deserve recognition and support.

## Examples:

- “On Poppy Day, we all need to reflect that our soldiers are putting their lives **at risk** for us” (2007\_10\_29).
- “I didn't think I would ever be free or see my family again, and I can only thank the [Bulgarian] police who put their own lives **at risk** to save me” (2005\_12\_22).
- “Servicemen and women are paid to put their lives **at risk** on behalf of the nation and we have a duty to provide them with the best equipment we can afford” (2000\_10\_25).
- Or the reporting about the documentary: “BRAVE MEN OF THE SEA. They are a special breed of men, who go out in boats when the seas are angriest, and willingly place their lives **at risk** so that the lives of others, perhaps less worthy, may be saved” (1981\_12\_21)

# Children's exposure to risk by parents and carers and institutional responses

- A large number of stories about children make it into the news. Co-occurrence of 'child' and 'children' close to 'at risk' (1970s: f=129 [9.71/k], 1980s: 184 [6.69/k], 1990s: f= 244 [6.92/k], 2000s: f= 489 [9.28/k]).

There are two typical domains of concern in the news:

- **Parents** and **carers** who expose children to risk and the (failure) of **institutional practices** to prevent it.
- **All kinds of factors** influencing the health and illness of children, including parent's ignorance.

## Examples

- "A baby died after three months of cruelty at the hands of his mother and her lover although he was on the social services register of children at risk, Norwich Crown Court was told yesterday." (1981\_11\_12)
- "A Bill giving social workers greater powers to protect children at risk from abuse is planned for the autumn. The Bill has been delayed pending the outcome of the Cleveland inquiry into child abuse, ..." (1988\_06\_06)
- "Thousands of parents are unwittingly putting their children's lives **at risk** by incorrectly fitting child seats, or worse still, not using restraints at all. " The RAC Foundation reports ..." (2005\_08\_19)

# The ongoing crisis of the National Health Service exposes **patients** to risk

- National Health Service (NHS) established in 1948. Ongoing concerns and debate about the costs.
- (1970s: f=34 [2.56/k], 1980s: f=89 [3.24/k], 1990s: f=136 [3.86/k], 2000s: f=193 [3.66/k]).

Key themes related to the NHS:

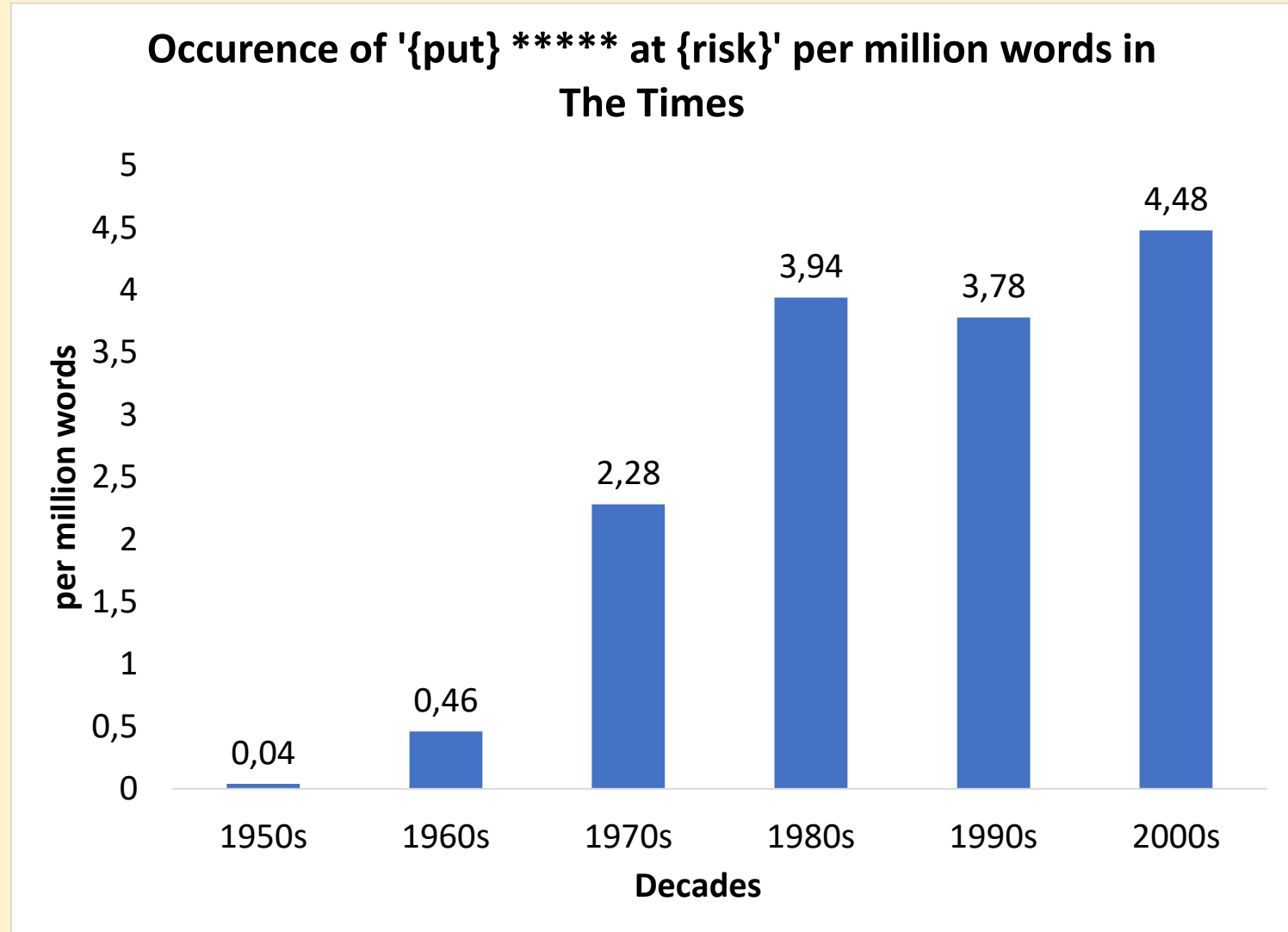
1. The quality and the costs of service delivery.
2. The ongoing industrial conflicts between staff and unions on the one hand and the conservative government on the other which occurred in the 1980s.
3. Irresponsible behaviour of doctors.

Examples:

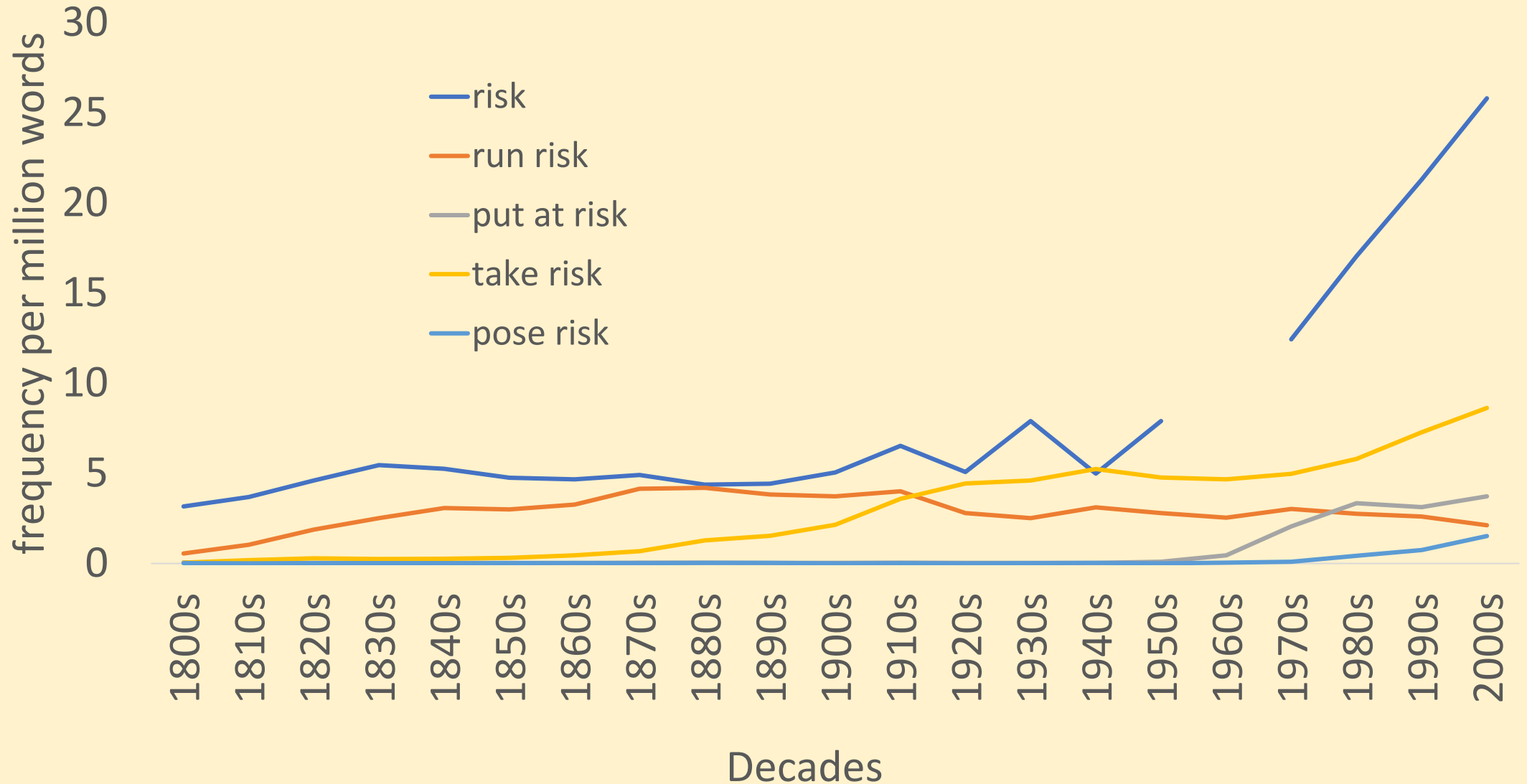
- The Prime Minister yesterday accused striking nurses of **putting patients at risk** as the controversy over the health service again boiled over in the Commons. (1988\_01\_15)
- The report, by a working party chaired by Dr Kenneth Caiman, has been drawn up after a spate of cases in which patients were **put at risk** by doctors whose shortcomings were common knowledge among their colleagues. (1995\_08\_08)
- Patrick Ngosa, 39, who feared he almost certainly had the Aids virus, but continued to practise, was ordered to be removed from the register for putting his patients at risk. (1997\_03\_12)

# Newsworthiness, the Scandal: *Put at risk*

- Reporting increasingly stresses the link between an agent (most of the time others, but also the person herself/himself) and an object (mainly people/persons) exposed to risk.
- This is the major driver of the increase of 'at risk'-construct from the 1960s to the 1980s.
- The 'scandal' of unreasonably put at risk is one defining meaning of the 'at risk'-construct.



# Comparison Risk Processes 1800s-2000s, The Times



# Social Roots of At-Risk–Hyphenation, 1980s-2000s

- Hyphenation of ‘at risk’ is a relatively recent development mainly observable since the 1980s.
- The 2000s witnessed a strong quantitative increase in, as well as growing variation of at-risk compounds.
- While the use of ‘at-risk register’ more than doubled (f=58), its proportion of all hyphenations dropped to about 20 per cent.
- Overall, 74 different at-risk + noun combinations:
  - **humans** (groups, children, patients, group, babies, population, people, individuals, girls, women, child, customers, family, infants, mothers, pupils, young),
  - **animals** (species, animals),
  - **things** (areas, mortgages, monuments, regions) and
  - **technical expressions** which measure and categorise (register, lists, category).

# At-Risk–Hyphenation, 1980s-2000s

## Frequency of nouns following at-risk, decades 1980s, 1990s, 2000s

1980s	1990s	2000s
register (21), groups (2), women (2)	register (24), groups (3), patients (3), cattle (2), group (2), list (2)	register (58), groups (43), children (16), patients (14), group (8), areas (7), babies (7), population (6), people (5), individuals (4), species (4), category (3), girls (3), mortgages (3), women (3), animals (2), child (2), customers (2), family (2), infants (2), monuments (2), mothers (2), pupils (2), regions (2), young (2)
Only once:		
cases, children, families, heterosexuals, list, patients, registers, specialties	areas, category, clientele, genes, lambs, monuments, patient, registers, women, young, zone	18-year-old, area, artefact, baby, bands, behaviour, boys, breeds, butterflies, cattle, countries, couples, four-year-olds, herbs, homes, hospitals, house, household, households, Iraqi, lists, livestock, members, minority, part, patient, person, personnel, players, populations, poultry, premises, products, programme, project, registers, rock, school, sites, sports, states, sub-groups, suppliers, teenagers, teens, tenants, workers, youths
N=33	N=47	N=256

# At-Risk– Hyphenation, 1980s-2000s

- Systematic **grammatical** and **practical/historical** reasons.
- The Guardian online style guide: “hyphens should, ... be used to form short compound adjectives, e.g. two-tonne vessel, three-year deal, 19th-century artist”.
- ‘At-risk’ ...
  - characterizes the quality of a group (at-risk migrants) or things (at-risk commodities).
  - refers to a specific institutional practice (at-risk register), and
  - in some instantiations, it characterizes a process which puts a valued object (person, social group or thing) at-risk (The Queen, New York Airport, annual income).
- But: How to explain the huge increase of adjectival constructs in recent decades?



# At-Risk–Hyphenation, 1980s-2000s

- **A systematic way of thinking about the world** supported by the rise of epidemiology and institutional practices:
  - Identifiable and separable **factors** which make the future predictable and manageable.
  - The **quality** of human beings or physical entities can be identified and determined by such factors specifying their at-risk status. ('at-risk girls', mortgages, animals, customers, monuments, regions, artefacts, bands and so forth).

“Inventions, ideas and new concepts often begin life as two words, then become hyphenated, before finally becoming accepted as one word. ... “Wire-less” and “down-stairs” were once hyphenated, and some old-fashioned souls still hyphenate e-mail” (The Guardian’s style guide)

# Conclusions

At least four layers how risk and language relate in text:

- *Risks as concrete events* (ferry disaster, railway crash, BSE, the oil crisis). Often 'traumatic' or 'defining' events which become part of the sociocultural knowledge.
- *Risks as institutional practices*. (at-risk register was established to help social workers protecting children, lists of species at risk of extinction)
- *Socio-structural changes* (transformation of the economy: increased deregulation and loss of the standardised full time lifelong employment, 1980s; changes in family planning: introduction of efficient contraception, 1960s and 1970s).
- *Socio-cultural changes*. Risk as an 'intrinsic' or defining quality of humans/things.

# Conclusions

- From the **risk** of **war** to **health** and **civilisation illnesses** and **temporary** as well as **lasting social issues**. Some of them still waiting for solutions (famines in Africa, abuse of children, flooding, extinction of species).
- Regularly in the news are **objects at risk** from the realm of **trade** and **economics** (1900s-60s) towards **people**, **social groups** and **jobs**, **children**, **patients**, **home** and **heritage** (1970s onwards).
- Reporting more frequently refers to the ‚scandal‘ of people putting themselves or being **put at risk**.
- **Epidemiology** and **institutional practices** contribute to describing people, animals and other valued things by their **at-risk status**.

# References

Publications which combine sociological research interest on risk with corpus linguistics:

- Zinn, J.O. 2018: The Proliferation of 'at risk' in The Times: A Corpus Approach to Historical Social Change, 1785-2009. *Historical Social Research* 43(2), 313-364. (doi: 10.12759/hsr.43.2018.2.313-364)
- Zinn, J. O. & McDonald, D. 2018: Risk in The New York Times (1987-2014) – A corpus-based exploration of sociological theories. Basingstoke, UK: Palgrave Macmillan.
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