

정보혁명과 보험정신 Information Revolution and Insurance Ethos

석승훈 SEOG S Hun
SNU Business School

seogsh@snu.ac.kr

Capitalistic





주제어 Topics

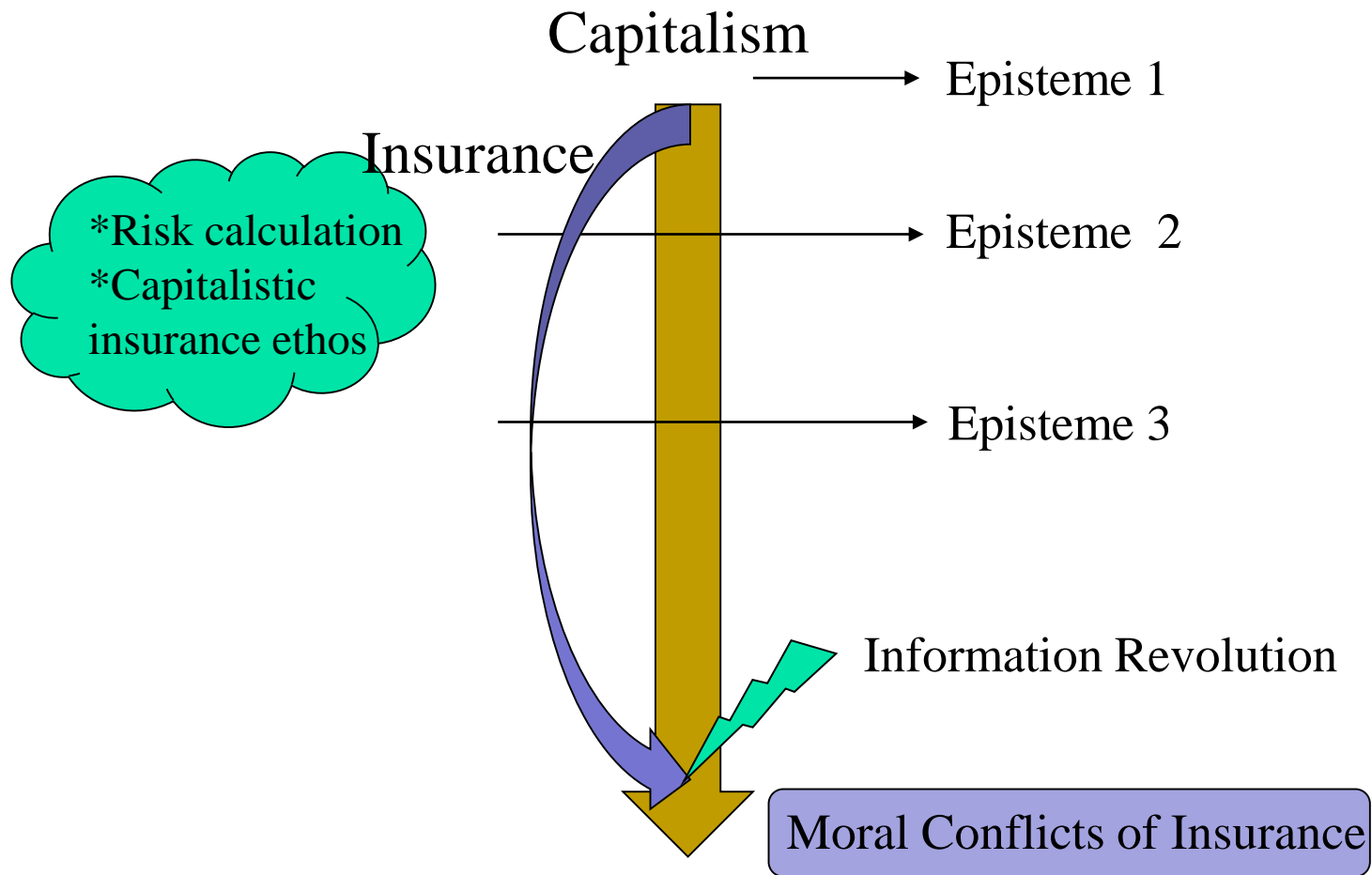
- 위험 계산 Risk calculation
- 자본주의적 보험 정신 Capitalistic insurance ethos
- 시대 인식 Episteme (Foucault)
- 정보 혁명 Information revolution
- 규율, 통제, 조작 사회 Society of discipline, control, manipulation
- 보험자되기 Becoming insurers
- 보험의 갈등 Conflicts of insurance



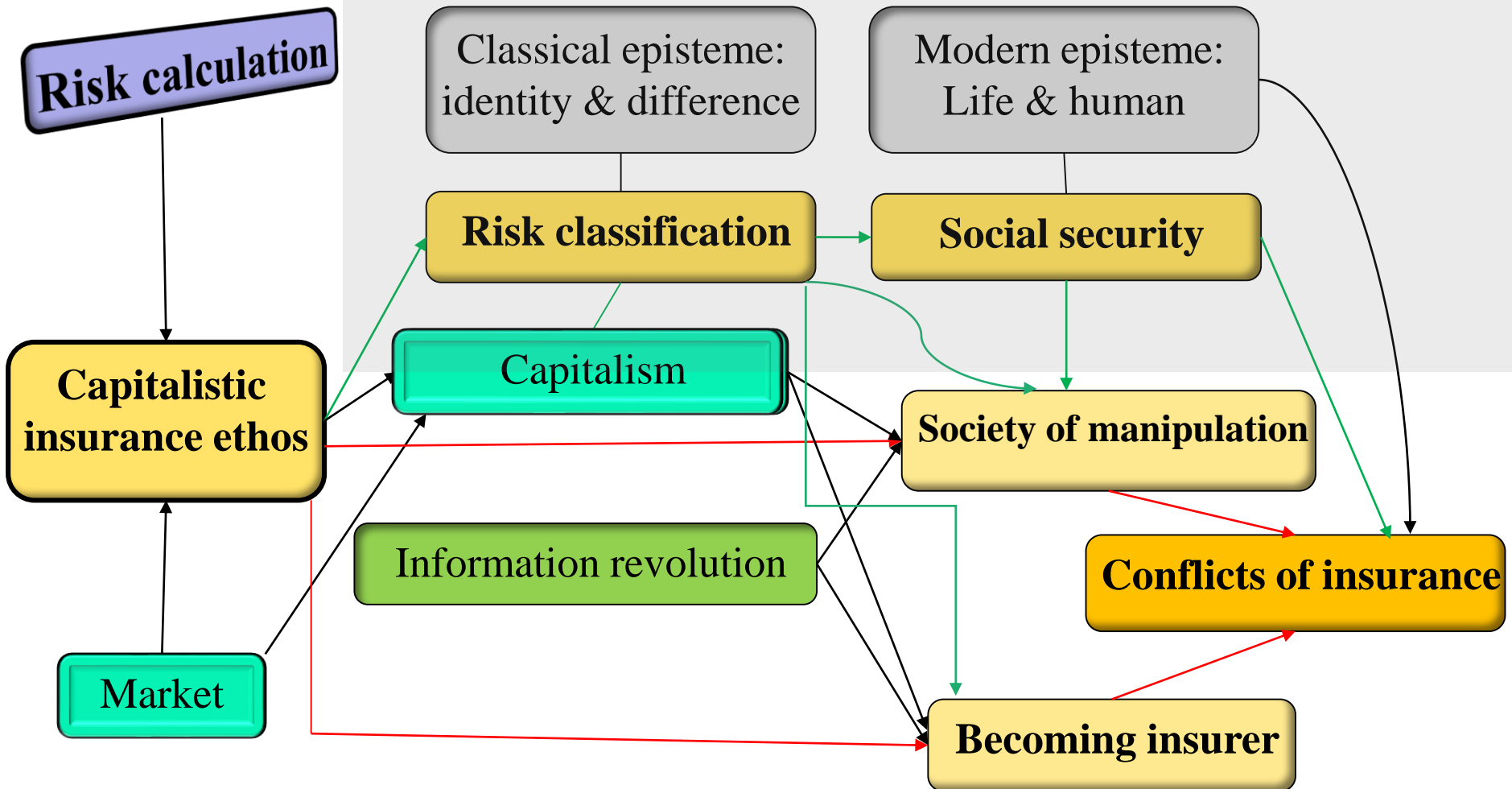
We discuss..

- **(1) Capitalism, (2) episteme and RI (= risk & insurance)**
 - RI => Risk calculation and capitalistic insurance ethos
 - Elective affinity between RI and the episteme of the early capitalism.
 - Insurance market represents capitalism.
- **The relation between RI and (3) IR (= information revolution)**
 - Society of manipulation
 - Conflicts of insurance
- **Our approach is**
 - Conceptual approach with a historical & philosophical view

Flow



Figure





Information Revolution

- **The 4th Industrial Revolution**, Information & Communication (IC) Revolution, Industry 4.0, Digital Revolution, or (still) 3rd Industrial Revolution..
- AI (Artificial Intelligence), Big Data, Robot, IoT (Internet of Things), Cloud,..
 - VR(Virtual Reality), 3D Printing,...
- 초연결 Hyper Connectivity
- Fintech, Insurtech

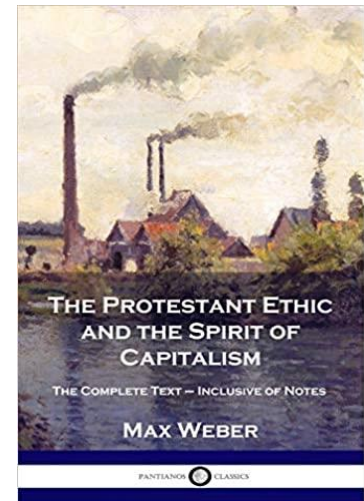


Insurance and Capitalism

- 1. WE DISCUSS..
- 보험은 자본주의의 시작과 밀접한 관련이 있다.
- 보험시장은 자본주의 근본 정신을 재현한다.
- .. 그리고 보험시장의 모순.
- Insurance is closely related with the beginning of capitalism.
- Insurance market represents a core spirit of capitalism.
- + Conflict of insurance market.

Primitive capital accumulation

- **Karl Marx:** 착취, 금융; The **exploitation & violence** of European states and merchants supported by **financial vehicles and markets**, including state debts, bonds and stocks.
- **Max Weber: The Protestant ethic (Calvinism)** 개신교 윤리 => the spirit of capitalism
 - *Beruf* (소명, 직업), predestination of salvation (구원 예정)
 - **Ascetic and methodical** (금욕, 체계적)
 - **Rational calculation**
 - Double-entry bookkeeping, profit calculation
 - Rational calculation is not unique to Protestant merchants.
- =><= **Both: No risk consideration** (Appadurai, 2012)



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위험계산 Risk calculation

- Risk calculation
 - Risk calculation was related to the **mathematical or actuarial findings of probability** as well as to **commercial fervor** (Bernstein, 1998).
 - Gerolamo Cardano (16C), **Blaise Pascal and Pierre de Fermat** (17C)
- Risk calculation **can be irrational.**:비합리적 계산가능
- Risk calculation was not only for **risk reduction** but also for **gambling**.



자본주의 보험정신

Capitalistic insurance ethos

- **Capitalistic insurance ethos = ethos of risk calculation with risk trading market : = 위험계산 + 위험거래**
- Capitalistic insurance ethos includes **gamble** as well as **risk hedge**. : 위험헷지 & 도박
 - The distinction between insurance and gambling is simply institutional rather than fundamental (Baker, 1996).
 - **Insurance is not opposite to gambling.**



Insurance and early capitalism

- ❖ **Insurance market: Maritime insurance** for East India company, and other companies.
 - Insurance allows company for the long term planning = higher risk.
 - => Colonization, slave trading
- ❖ **(Stock) Company is a risk transfer and sharing mechanism** (Frank Knight, 1921).
 - Limited liability, legal entity, financial market
- ❖ **Market = insurance mechanism** (Karl Polanyi 1944)
 - Input markets insure against volatile input prices.
 - (land, labor, capital)
- Eventually, **insurance and financing tools** ((state) bonds, stocks)
=> **Initial primitive accumulation of capital** (K. Marx)





Capitalistic insurance ethos

- **Expansion of the capitalistic insurance ethos as capitalism expands.**
 - Expansion of insurance markets
 - Capital market: stock & financial asset trading
 - Expansion of stock companies
 - Corporation's profit calculation & insurance mechanism (Knight)
 - Money demand under uncertainty (Keynes => Macroeconomics)
 - ...
- **More insurance => Higher risk 보험 확대 => 위험 확대**
 - Insurance allows for the pursuit for further risk.
 - Eg: Lloyd's of London, stock company, animal spirit (Keynes), uncertainty (Knight)
- 자본주의 확대 ~ 보험확대 => 위험확대

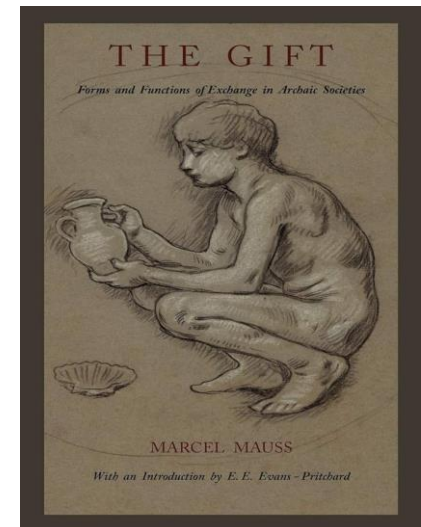


보험시장의 어려움/불완전성

- 보험시장은 유령을 거래한다.
- 위험은 유령
 - 위험은 어디에나 있지만 보이거나 잡히지 않는다.
 - 위험이 실현되는 때에 위험은 사라지고 손해나 고통으로 존재
 - 위험은 어떤 실체로서가 아니라; 되는 것, 다가오는 것, 차이로서 존재
- 위험은 다차원적
 - 확률분포: 객관, 주관...
 - 감정, 정동: 심리, 공포, 슬픔...
 - 사회적: 금기(taboo), 순수, 도덕성, 통치성...
- 보험가격결정과 유령의 거래
 - 다차원성을 무시하고 계산적 일차원으로 환원

보험시장의 제1 모순

- 상부상조 vs. 개인이익
 - 보험의 근본정신 = 상부상조, 사회연대
 - 보험시장: 개별적, 차별적 이해관계
- => 연대(mutuality, solidarity) vs. 개인(individuality)
 - The spirit of solidarity vs. the spirit of discrimination and individuality
 - Subsidy and embracing of info problem vs. self-interest and resolving
- 선물(gift) v 거래(trade) (Mauss, 1925)
 - 거래: 등가, 스팟 교환
 - 선물: 부등가, 시차 교환
 - 보험정신 = 선물 => <= 거래 = 시장
 - 선물은 거래할 수 없다.



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중간 요약

- [중간 요약]
- (자본주의) 보험정신 ~ 초기 자본주의
 - 선택적 친화성
- 보험정신의 확대 ~ 자본주의 확산 ~ 위험 확대
- 보험시장의 제1 모순: 연대/선물 v. 개인/거래

- Capitalistic insurance ethos ~ Early capitalism
 - Elective affinity (in Weber's Term)
- Expansion of capitalistic insurance ethos ~ capitalism development
- Intrinsic conflict of insurance market: solidarity/gift v. individuality/trade

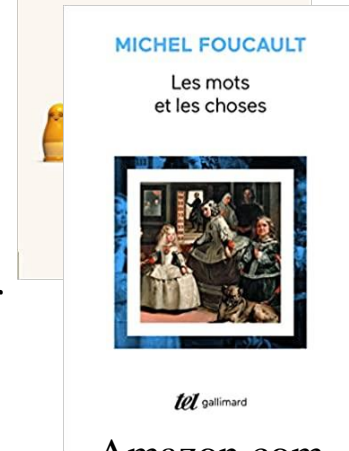


보험과 시대인식 Insurance & episteme

- 2. WE DISCUSS..
 - 보험과 시대인식(푸코)의 밀접한 관련성.
 - 근대(고전시대): 위험계산과 보험정신
 - 현대: 보험시장확대, 사회보험, 사회보장
- Insurance is closely related with Episteme.
 - Classical period (Early capitalism)
 - Risk calculation & Insurance ethos
 - Modern period
 - Expansion of insurance market
 - Social insurance & security

Michel Foucault: épistémè

- Michel Foucault (1994 [1966]): **Episteme** (épistémè in French) refers to the **underlying knowledge** and idea in an epoch. 時代認識/知識
- Episteme of Renaissance (16C ~ early 17C)
 - “Similarity” 유사성
- Episteme of the classical period (late 17C ~ 18C) 근대
 - “Identity” and “Difference” 동일성과 차이
 - => Natural history, money and inflation theories, and general grammar
- Episteme of the modern period (late 18C ~) 현대
 - “Life” and “Human Beings” 생명, 인간
 - => Biology, Political economy, philology(文獻學).
- (Late 19C~)
 - Human sciences: Psychology, Sociology, Literature
 - Structuralism 構造主義: Psychoanalysis, Ethnology (Anthropology), Linguistics (Ferdinand de Saussure, Claude Lévi-Strauss)
 - => Death of Man



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Insurance & episteme: classical period 근대

- 동일성과 차이의 시대인식은 자본주의 보험정신으로 재현된다.
 - Risk calculation produces identity and difference.
 - Risk classification, Life table
 - Risk categories differentiate low risk from high risk, healthy people from unhealthy people, and so on.
- 자본주의 보험정신은 “자본주의”와 “동일성과 차이”의 시대인식의 연결고리이다.
 - As capitalism develops, more accurate calculation and differentiation would produce higher profits.
 - The classical period is also overlapped with the outset of capitalism.
- 초점은 리스크와 인구; 생명과 인간 무시
 - The purposes of risk calculation and insurance ethos were **debt, tax, governmentality and profit rather than life** (see Foucault, 1991).

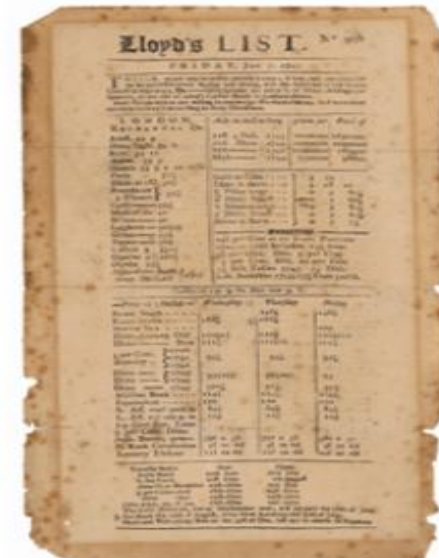
Eg: Risk calculation

Edmond Halley's Life Table (1693)

7.	8	9.		14		18		21		27		28				
11.	11.	6.		5½		2.		3½		5	6	4½	6½	9.	8.	7
36.		42.		45				49	54.		55.	56				
8.	9½	8.	9.	7.	7.		10	11.		9.	9.	10.				
	70	71.	72		77		81		84.		90	9.				
9½	14	9	.11	9½	6.	7.	3.	4.		2.	1.	1.		1		
98	.99	.100.														
0	.	½	.	¾												

Age. Curt.	Per- sons.	Age. Curt.	Per- sons.	Age. Curt.	Per- sons.	Age. Curt.	Per- sons.	Age. Curt.	Per- sons.	Age. Curt.	Per- sons.	Age. Curt.	Per- sons.
1	1000	8	680	15	628	22	586	29	539	36	481		
2	855	9	670	16	622	23	579	30	531	37	472		
3	798	10	661	17	616	24	573	31	523	38	463		
4	760	11	653	18	610	25	567	32	515	39	454		
5	732	12	646	19	604	26	560	33	507	40	445		
6	710	13	640	20	598	27	553	34	499	41	436		
7	692	14	634	21	592	28	546	35	490	42	427		
Age. Curt.	Per- sons.	Age. Curt.	Per- sons.	Age. Curt.	Per- sons.	Age. Curt.	Per- sons.	Age. Curt.	Per- sons.	Age. Curt.	Per- sons.	Age. Curt.	Per- sons.

Lloyd's List (1734)



Lloyd's Coffee House published daily shipping news, informing people about departures and arrivals, the cargo aboard each ship, where other country's fleets were operating and where pirates were known to be active.

https://commons.wikimedia.org/wiki/File:Halley_wroclaw.gif

<https://www.lloyds.com/about-lloyds/history/coffee-and-commerce>



Insurance & episteme: modern period 현대

- 생명이 보험 담론의 중심으로 되면서, 보험정신과 종교(기독교)의 갈등이 심화. (see Baker, 1996; Ewald, 1999; Rowell and Connelly, 2012).
 - Limited/mortal/secular vs. unlimited/immortal/sacred
 - Life was visible only in this contrast.
- 보험이 신의 섭리의 수단으로 받아들여짐
 - Purchasing insurance is to help the poor and dependents ~ Providence.
- 생명과 인간: => 사회보험, 보장
 - **Social insurance and social security (late 19C~)**
 - Political economy = the discourse of life and labor,
 - **Social insurance and security = the discourse of life and risk/insurance.**

- 
- 명제1: 시대인식은 자본주의 보험정신을 통해 설명가능

- Proposition 1: **The Foucauldian epistemes can be described in terms of capitalistic insurance ethos.**
- Specifically, the episteme of the **classical period** and early capitalism is best **represented by risk calculation and capitalistic insurance ethos.**
- **Life and human beings**, the episteme of the **modern period** became prominent when **social insurance and social security** became visible in the late nineteenth century.



Insurance: identity ~ difference

- 명제2: 보험정신은 동일성과 차이를 뒤섞으며, 위험을 줄이기 전에 생산한다.
- Proposition 2: **Insurance ethos mingles differences with identities, and produces risks before reducing them.**
- **Insurance does not simply distinguish identity from difference, but also makes them cross each other.**
 - Time: the future = the present by discounting
 - Risk: the otherwise identical spaces or people can be differentiated by definition and calculation of risk.
 - Eg: Different risk groups based on their blood pressures, weights, or residential locations.
- **Risk calculation and insurance ethos do create risks as well as categorize existing risks.** (Ewald, 1991)
 - Governmentality: governing people based on population risks



Privilege of insurance: fair discrimination

- 핵심 자본주의 정신으로서 보험시장의 특권: **공정한 차별**
- 공정한 차별은 위험계산과 정보와 데이터 집적과 분석을 필요.
- **Privilege of the insurance market as a core spirit of capitalism**
- "**Fair discrimination**," an obviously contradictory expression, is the phrase cherished (*only*) in the insurance market.
 - The discrimination power of insurance is backed by the capacity of collecting and analyzing information and data.
 - **Capitalistic insurance ethos** critically depends not only on **risk calculation** but also on **information/data collection & analysis**.
 - Actuarial probability, expectation, and variance are the products of collective data and information.
 - **The law of large numbers**, which laid the ground for insurance markets, requires insurers to collect data as much as possible.



보험시장 제1 모순의 확장

- 제1 모순
 - 연대(solidarity) vs. 개인(individuality)
- 공정한 차별 =>
 - 이익을 위한 차별 확대 =><= 상호성, 연대성
- 모순의 재현 양식(20C~)
 - Insurance market v. social insurance
 - 신자유주의 v. 공동체의식
 - 자유(liberty) v. 평등/형평(equality/equity)



Society and Information Revolution

- 3. WE DISCUSS..
 - 정보혁명은 사회를 바꾼다.
 - 정보혁명은 보험혁명이다.
 - 보험시장의 두 모순과 보험자의 역할.
- Information revolution transforms society.
- Information revolution is insurance revolution.
- Double conflicts of insurance and new roles of insurers.



통치성과 사회

Governmentality and society

- ❖ Governmentality: How to govern the state?
- **Society of Sovereignty (Foucault): ~16C**
 - Ruling people for ruler & king
- **Society of Discipline (Foucault): 17C ~ 20C 규율사회**
 - Governing people with organizing production & administering life
- **Society of Control (Deleuze): late 20C 통제사회**
 - Digital era (Early Information Revolution)
 - Individuals => Dividuals
- **Society of Manipulation: 21C 조작사회**
 - Complicated & indirect control
 - Complicated & (hyper-) connected digital era
 - Information Revolution (4th Industrial Revolution)



Society of discipline 규율사회

- Society of discipline (Foucault)
 - Successor of the societies of sovereignty
 - 18, 19 C, reaching height at the outset of 20C.
 - Individual never ceases passing from one closed environment to another.
 - Eg of enclosures: prison, hospital, factory, school, family..
- **Goals & functions of sovereignty soc v. disciplinary soc**
 - Sovereignty: tax & rule on death
 - Disciplinary: organizing production & administering life
- => **Social insurance** is an important device of governmentality



Society of control (Gilles Deleuze, 1992)

- Society of discipline
 - Different internments or spaces of enclosure thru which the individual passes are independent variables.
 - Common language is **analogical**. /analog/
 - Enclosures are **molds**[주형鑄模], distinct castings.
- Society of control (late 20C ~)
 - Different control mechanisms are inseparable variations.
 - Language is **numerical**.
 - Controls are a **modulation**[조정調整], like a self-deforming cast, continuously changing.



Society of control 통제(관리)사회

- Discipline regarding passing
 - Always starting again: school -> barracks[병영 兵營] -> factory ..
 - Apparent acquittal[무죄선고 無罪宣告] between two incarcerations
- Discipline regarding identification
 - **Signature** that designates the individual.
 - **Number**/administrative numeration that indicates his position within a mass.
- Control regarding passing
 - Never finished with anything
 - Limitless postponements
- Control regarding identification
 - Signature, number => **code = password** v. watchwords (discipline)
 - Individuals have become "**dividuals**", masses, samples, data, markets, or "banks."



Information revolution

- **Information revolution**
 - **Data & information are collected and spread.**
 - **Individual -> Dividual**
 - **Life -> deconstructed/dissected into molecules, mass.**
 - **Multiplicity, multi-linearity**
 - **=> Risk is compound, complex, & multi-dimensional.**
- **Society of control => Society of manipulation with extreme uncertainty**
- 2008 financial crisis, COVID-19 Pandemic (2020, 2021)
 - <= Dividualization, risk complication

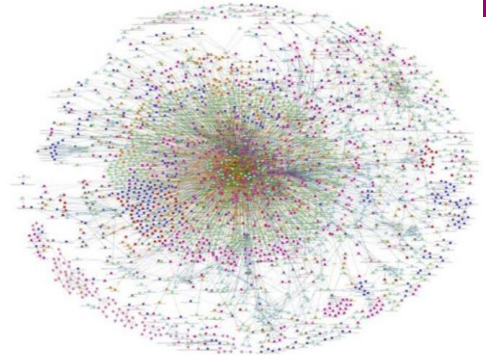
Society of manipulation 조작사회

■ Society of manipulation

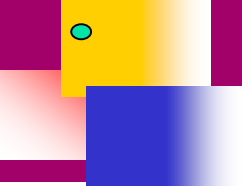
- Network, media, information viral spread
- => Need to consider **several steps ahead**.
- => **Extreme uncertainty**
- **Manipulation** considering the people's reactions and responses..
 - **Manipulation is indirect.**
 - Rather than direct discipline or control.

■ Extreme uncertainty

- Steps ahead implies uncertainty.
- **Information gathering & analysis => classification => risk creation.**
- **Individually more information => Higher risks for society**



https://www.researchgate.net/figure/Left-Visualization-of-the-COVID-19-KG-in-BiKMi-Right-Querying-paths-between-two_fig1_340650109
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- 
- 명제 3:
 - 정보혁명하에 정보는 모아지고 확산되며, 위험은 복잡해진다.
 - 정보혁명은 사회를 통제사회, 더 나아가 조작사회로 이끈다.

- Proposition 3:
- (1) Under **information revolution**, **information becomes collected and spread**; however, **risks become compounded and complicated**.
- (2) **Information revolution leads to the society of manipulation**, where manipulation implies an indirect control with modulation and metamorphosis. In the society of manipulation, individuals are compounded; languages are numerical and network; and identifications are confirmed through compound techniques, including multiple passwords and biometrics.



보험자되기 Becoming insurers

- **Information revolution => data collection and analysis => discrimination**
- **=> Corporations are becoming insurers.**
 - **“Fair discrimination”**: Corporations are eager to produce, classify, and discriminate risks as insurers exclusively have done.
 - **Corporations’ discrimination over consumers are justified in the name of efficiency from information revolution.**
 - **=> Discrimination becomes fair.**


$$IR = IR$$

- 명제 4: 정보혁명 = 보험혁명
- **Corporations are becoming insurers. =>**
- Proposition 4: **IR = IR**
- **Information Revolution is Insurance Revolution.**
- The relation between RI and IR is well **beyond** “Insurtech”.



보험시장의 이중 모순

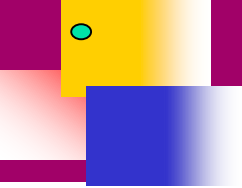
- (Old) 연대(mutuality, solidarity) vs. 개인(individuality)
 - The spirit of solidarity vs. the spirit of discrimination and individuality
 - Subsidy and embracing of info problem vs. self-interest and resolving
- (New) 제2 모순: 개인(individuality) vs. 분할자/분인(dividuality)
 - Individuality is related to life and human beings.
 - Dividuality deconstructs life into digital numbers and data
 - Life and human beings vs. data and numbers
- Double moral questions:
 - **Discrimination** = individuality =><= solidarity = **Embracement**
 - Role of government for societal solidarity.
 - **Life, Human right** = individuality =><= dividuality = **Data, Profit**



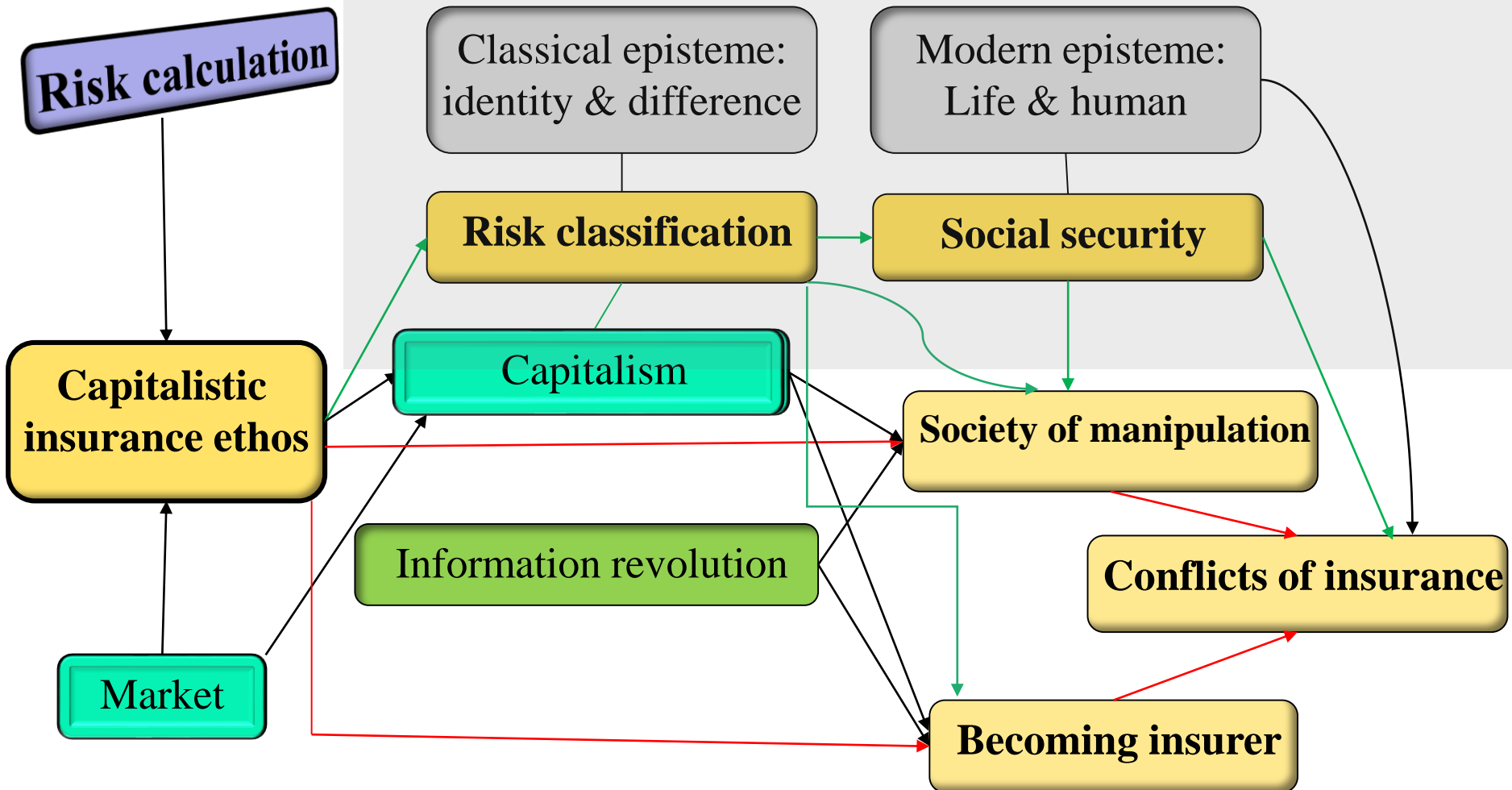
Insurers will become..

■ Questions for insurers

- Given that corporations behave like insurers in important aspects, **what are the remaining roles for conventional insurers?**
- Can insurers remain as **vehicles distinct from other corporations?**
- Does the distinction imply that insurers should do focus on **reducing risks rather than creating them?**
- Insurers may learn lessons by observing **religions** after losing their territories to secular machines such as government, charity foundations, and insurance.

- 
- 명제 5:
 - 정보혁명으로 보험은 이중 모순을 노출한다.
 - 정보혁명은 도덕성에 대한 질문, 전통적인 보험자의 역할에 대한 질문을 던진다.
-
- Proposition 5:
 - (1) Information revolution intensifies the immanent conflicts of insurance ethos. **Conflicts exist doubly between solidarity and individuality and between individuality and dividuality.**
 - (2) Information revolution raises **questions on morality and also on the role of conventional insurers.**

Figure, again





결론

- **위험 계산 + 자본주의적 보험정신**은 푸코의 고전시대 인식과 베버의 초기 자본주의를 재현한다. (명제 1)
 - 자본주의적 보험정신 = 분류 => **동일성과 차이**
 - 현대 시대인식인 **생명**은 **사회보험**으로 재현된다.
- 자본주의적 보험 정신은 **차이와 동일성**을 뒤섞으며, 위험을 줄이기 전에 **생산**한다. (명제 2)
- 정보 혁명하의 **조작사회** (명제 3)
 - 규율사회 (Foucault) => 통제사회 (Deleuze) => 조작사회와 고도의 불확실성
 - 조작 = 조율과 변태를 통한 간접적인 통제
- **IR = IR**: 정보 혁명 = 보험 혁명 (명제 4)
 - 기업의 보험자되기.
- 보험의 **이중 모순** (명제 5)
 - 연대 v. 개인; 개인 v. 분할자(dividuality)
 - 보험자의 미래?



- 감사합니다.
- Thank You.



Conclusion: Main findings

- **Risk calculation and capitalistic insurance ethos (Proposition 1)**
 - Represent the Foucauldian episteme of the classical period and (Weber's) early capitalism.
 - Capitalistic insurance ethos = classification => identity & difference
- **Capitalistic insurance ethos mingles differences with identities, and produces risks before reducing them. (Proposition 2)**
- **Society of manipulation under information revolution (Proposition 3)**
 - Society of discipline (Foucault) => society of control (Deleuze) => society of manipulation & high uncertainty
 - Manipulation = an indirect control with modulation and metamorphosis.
 - In the society of manipulation, individuals are compounded; languages are numerical and network; and identifications are confirmed through compound techniques, including multiple passwords and biometrics.
- **IR = IR: Information revolution = insurance revolution (Proposition 4)**
 - Corporations are becoming insurers.
- **Double conflicts in insurance (Proposition 5)**
 - solidarity v. individuality; individuality v. dividuality
 - The future of insurers?



List of propositions

- Proposition 1: The Foucauldian epistemes can be described in terms of capitalistic insurance ethos.
 - (1) Specifically, the episteme of the classical period and early capitalism is best represented by risk calculation and capitalistic insurance ethos.
 - (2) Life and human beings became prominent when social insurance and social security became visible in the late nineteenth century.
- Proposition 2: Insurance ethos mingles differences with identities, and produces risks before reducing them.
- Proposition 3:
 - (1) Under information revolution, information becomes collected and spread; however, risks become compounded and complicated.
 - (2) Information revolution leads to the society of manipulation, where manipulation implies an indirect control with modulation and metamorphosis. In the society of manipulation, individuals are compounded; languages are numerical and network; and identifications are confirmed through compound techniques, including multiple passwords and biometrics.
- Proposition 4: Information revolution is insurance revolution.
- Proposition 5:
 - (1) Information revolution intensifies the immanent conflicts of insurance ethos. Conflicts exist doubly between solidarity and individuality and between individuality and dividuality.
 - (2) Information revolution raises questions on morality and also on the role of conventional insurers.