



## Why do Western States Love (Military) Robots?

Isodarco XXVI Winter Course, Andalo, January 8

Dr. Niklas Schörnig

## Outline of the presentation

- 1) All militaries worldwide are interested in UXVs
- 2) Western states do have a special inclination to military UXVs: 7 arguments
- 3) Impact of the Western inclination for disarmament and arms control

## All militaries worldwide have interest in UXVs

- // Robots are perfect for **3-D scenarios: Dirty, Dull & Dangerous jobs**
- // **> 70 Countries** either develop, produce or procure UXVs (usually drones)
- // **Expectation:** increase in demand for UAVs excels rise in defence budgets.
- // **Lucitel Consulting:** 2010 – 2016 expectation  
Defence spending worldwide: **+ 0,72%**  
worldwide spending for UAVs: **+ 18%**
- // With **liberal Western states in the driving seat** (USA, Israel) ...
- // ... but **some non-Western** states close behind (Russia, China...) or at least trying (Iran)

## Possession of „medium and/or heavy UAVs“ (Military Balance 2011)

// Total of 34 states

// Classification according to *Polity IV*-index:  $-10 \leq DI_n \leq 10 \rightarrow 6 \leq DI_n \leq 10$ : “democratic“

### Democracies

Canada	(10)	Australia	(10)
USA	(10)	Lebanon	(07)
Belgium	(10)	Brazil	(08)
Finland	(10)	Mexico	(08)
France	(10)	SA	(09)
Germany	(10)	Philippines	(08)
Greece	(10)	Israel	(10)
Italy	(10)	SK	(08)
NL	(10)	India	(09)
Spain	(10)	Turkey	(07)
Sweden	(10)	UK	(10)
CH	(10)	Malaysia	(06)

### Autocracies

China	(-7)
Singapore	(-2)
Sri Lanka	(04)
Thailand	(04)
Egypt	(-3)
Iran	(-7)
Jordan	(-3)
Morocco	(-6)
Ecuador	(05)
Azerbaijan	(00)

//  $\rightarrow$  24/34 states democratic  $\rightarrow$  71%

## Possession of „medium and/or heavy UAVs“ (Military Balance 2011)

// Classification according to *Economist Intelligence Unit Democracy index*

### Democracies

Canada	(10)	Australia	(10)
USA	(10)		
Belgium	(10)	Brazil	(08)
Finland	(10)	Mexico	(08)
France	(10)	SA	(09)
Germany	(10)	Philippines	(08)
Greece	(10)	Israel	(10)
Italy	(10)	SK	(08)
NL	(10)	India	(09)
Spain	(10)		
Sweden	(10)	UK	(10)
CH	(10)	Malaysia	(06)

### Autocracies

China	(-7)
Singapore	(-2)
Sri Lanka	(04)
Thailand	(04)
Egypt	(-3)
Iran	(-7)
Jordan	(-3)
Morocco	(-6)
Ecuador	(05)
Azerbaijan	(00)
Lebanon	(07)
Turkey	(07)

// 22/34 democratic → 65%

## ***Special inclination of the West (I):*** **The Western technological edge & technological inclination**

- // Western states have „**technological edge**“ in robotics & IT...
  - // Leading the **civilian development** in robotics and IT
  - // Robotics & IT inherently **dual-use** in character
  - // Western states well suited to incorporate private R&D into the military (Evangelista)
  - // Resources to buy latest military technology
- // Strong influence of the „**Military Industrial Complex**“
- // → “We do because we can”-Logic (“*Technological Imperative*”)

## Special inclination of the West (II): Impact of Norms and Cultural influences

- // Western states (especially the US) have **specific inclination towards technological solutions** (Dunlap; Gray)
- // **Fascination for artificial life** for centuries
- // Autonomous systems/robots present in almost all forms of **popular culture** (movies, literature, toys)
- // Peter Singer: “Why a book on robots and warfare?  
*Because robots are frackin’ cool*”  
→ **fascination, curiosity, temptation**

## ***Special inclination of the West (III): The monetary temptation***

- // **Democracies more cost-sensitive** than other regimes
- // General believe: **UXV cheaper in production and operation**
- // **Design & Operation:** no need for life-support system; fuel consumption etc.
- // **Follow-up costs:** No/less pensions/insurances
- // Even **more advantages** due to **more automation**
- // **UXVs as cheap alternative while budgets are constrained**



## ***Special inclination of the West (IV): Compliance with IHL***

According to supporters:

- // Democracies more inclined to honor IHL
- // UXVs: Precise reconnaissance & timely attack→
- // Higher precision & higher effectiveness→
- // **Better discrimination between combatants and non-combatants &**
- // **easier to provide for proportionality**
- // Probably **advantages** due to **more automation ...**
- // ... but highly **debated** (Sharkey)

## ***Special inclination of the West (V): Reduced Civilian Casualties***

According to supporters:

- // New mode of **global surveillance warfare** (Shaw)  
→ civilian casualties have become important.
- // Arkin: robots can act with more restraint, acting „**more human than humans**“
- // Automized warfare/use of military robots might reduce civilian (see IV)
- // Even **more advantages** due to **more automation**
- // **Highly debated** (Sharkey, HRW etc.)

## ***Special inclination of the West (VI): Casualty Aversion***

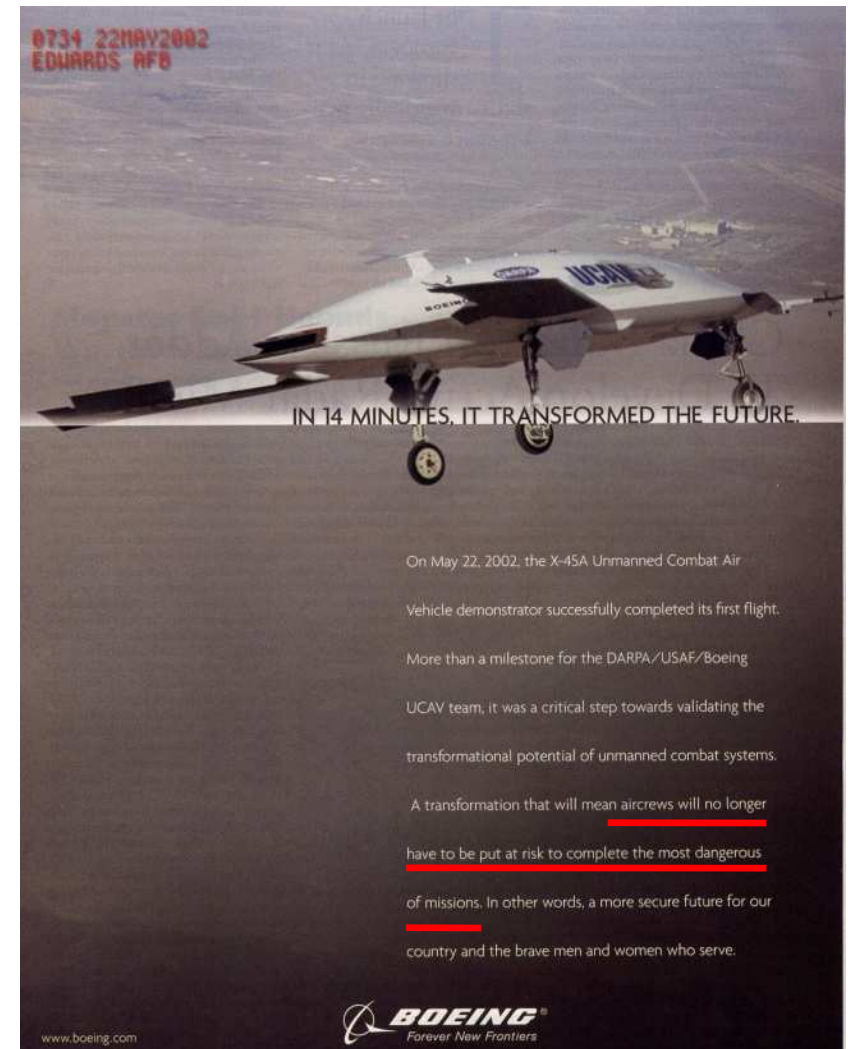
- // Western democracies said to be **highly casualty averse** &
- // Decision maker have **to take account of public opinion**
- // According to literature Western casualty aversion is higher when
  - // **military mission is a „War of Choice“** (Freedman)
  - // **no bipartisan support** for military mission
  - // soldiers in theatre are **conscripts**
  - // **no visible progress** regarding the missions declared objectives
- // Especially likely in **internationalized armed conflicts** (“*small wars*”) →
- // **Typical scenario Western states currently face**

## ***Special inclination of the West (VI): possible reactions to avoid the „casualty trap“***

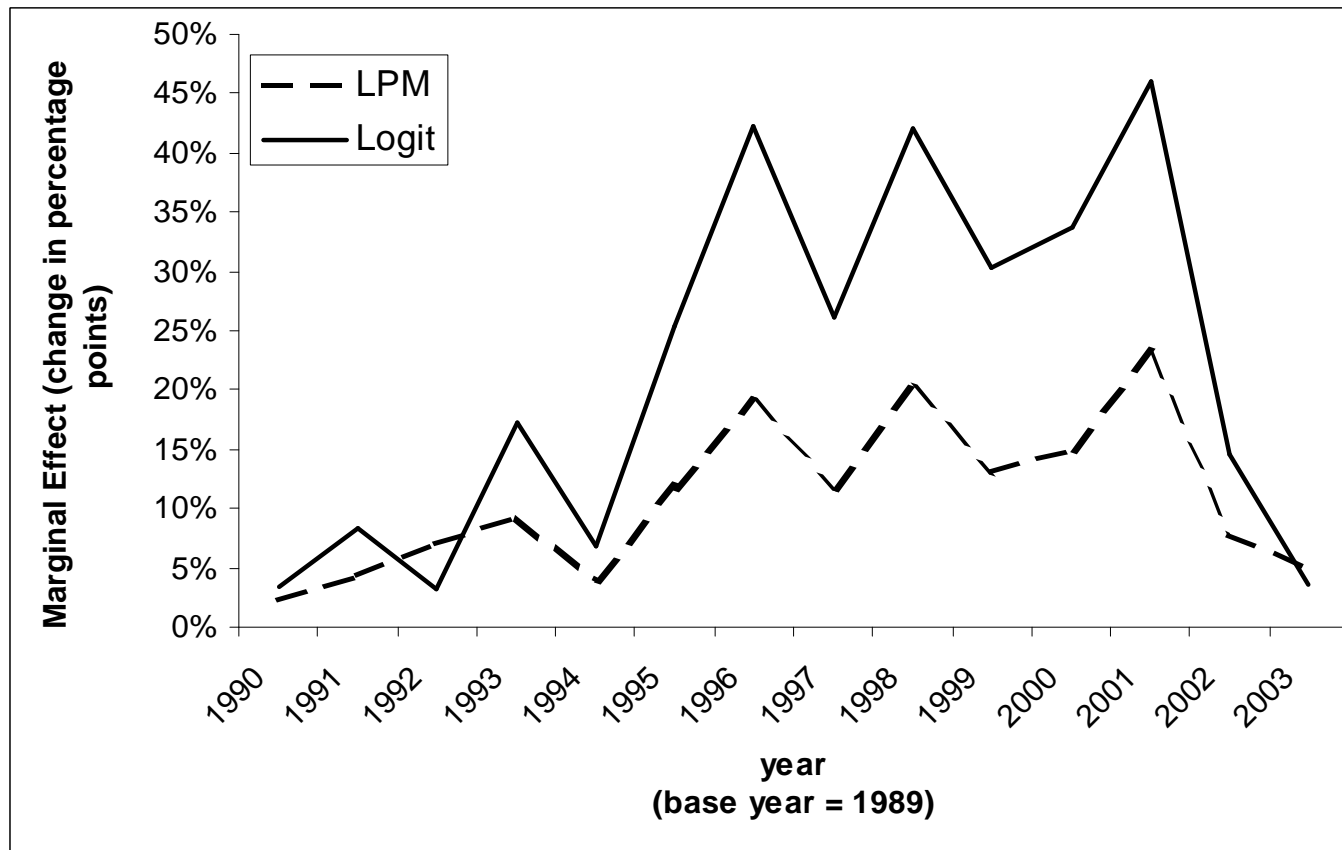
- // Approach 1: “Divison of Labour”**
  
- // Approach 2: “Outsourcing”**
  
- // Approach 3: ”Robotization”**

## Special inclination of the West (VI): Drones & Casualties

- // Use of (automated) robots **promise zero-casualty warfare** →
- // **Allows for military missions** which are currently out of the question due to fear of public backlash
- // **Advantages due to more automation**
- // **Boeing Add 2002:**  
“... It transformed the future...”  
“... **aircrews will no longer have to be put at risk to complete the most dangerous of missions...**”



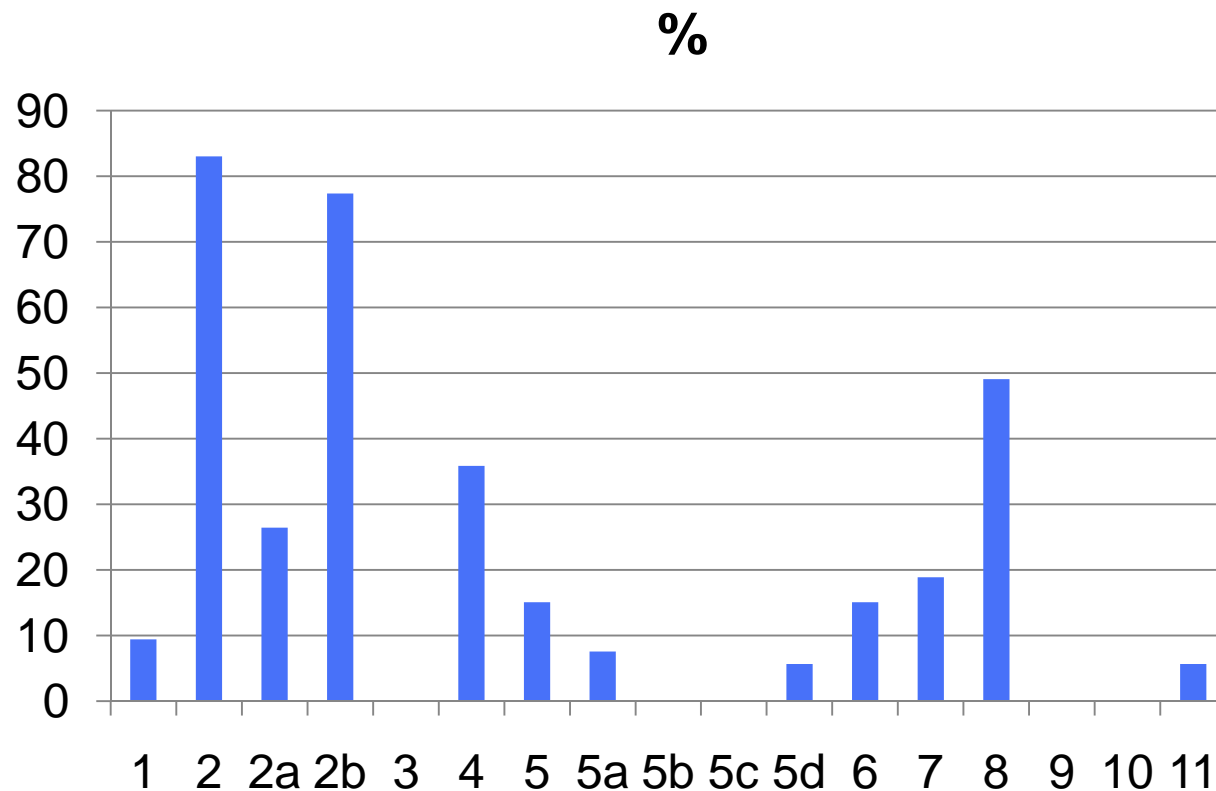
## Special inclination of the West (VI): Selling Weapons after the Cold War



[Ceteris Paribus probability of the occurrence of Protection of Soldiers-argument in Jane's Defence Monthly advertisements with respect to 1989]

Source:  
Schörnig/Lembcke JCR, 50:  
2, 2006, p. 204-227

## Content analysis of Australian news articles regarding Australian UAV-procurement (1999-2010; $n = 53$ )



### 2. Capabilities

#### 2a. strategic

#### 2b. tactical

### 4. Casualties

### 5. New Scenarios

#### a. Terrorism/Piracy

#### b. Urban Warfare etc.

#### c. Hum. Intervention

#### d. Civilian application

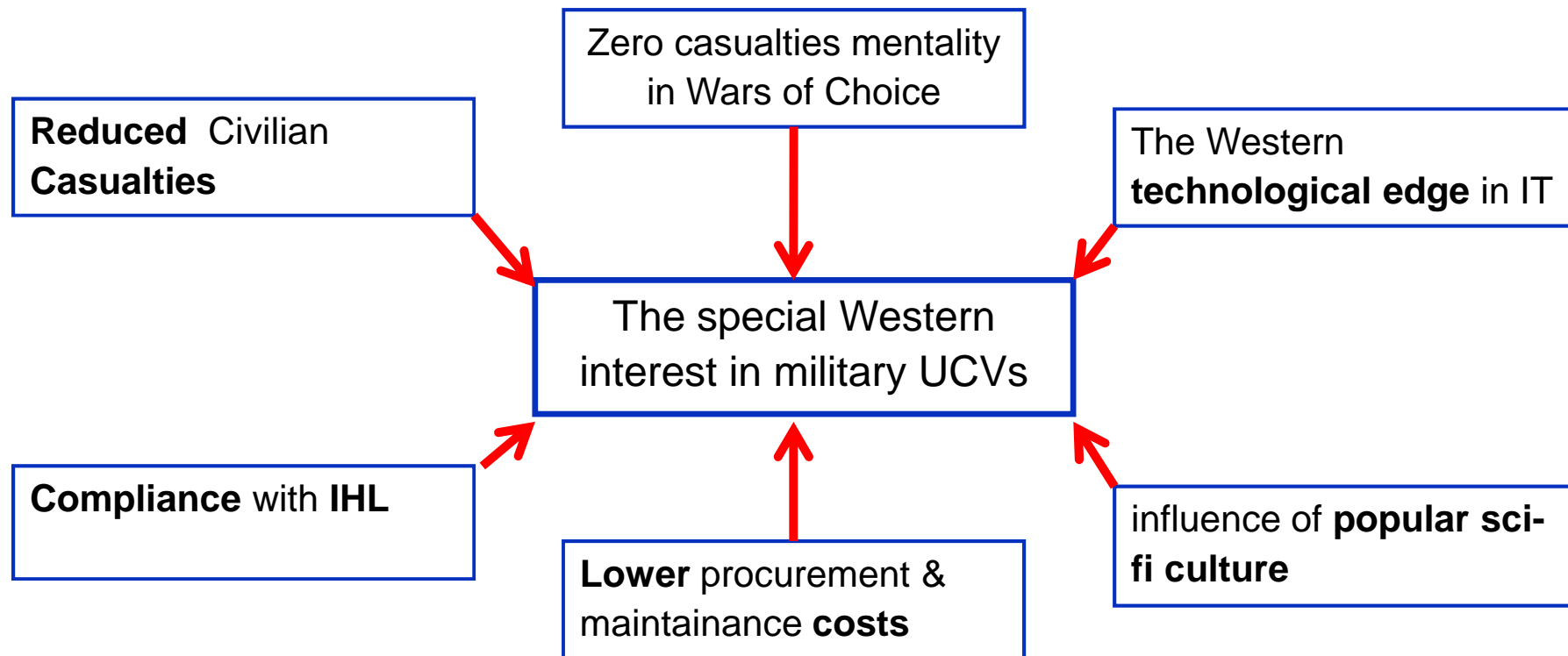
### 7. Cost reduction

### 8. National (security) interests

### 10. Civilian casualties

■ %

## Summary: Western, liberal states have *special inclination* towards UCVs





## Counterweight forces to the Western momentum?

- // **Robotization and automation address specific liberal needs** of Western democracies
- // **“Keynes-problem”**: short-term gains outweigh long-term problems  
(*In the long run all politicians are elder statesmen or dead*)  
→ **no counterweight forces** in the present
- // **Enormous problems for disarmament**  
→ even “civilian powers” like **Germany will not promote disarmament**
- // **Verification seems VERY hard – capabilities based on software code?**

## Counterweight forces to the Western momentum?

- // **Scandalization** by NGOs via focus on **civilian casualties?**
- // **Conflicting** democratic **norms**: other civilians vs. own soldiers
- // Likely **entanglement in technological issues**
- // Even **civilian case no clear cut**: humanitarian intervention?
- // Already some **log-ins** creating **path-dependency**: **Procurement running**  
→ **Course already set?**
- // **Conclusion:**
  - // ***Disarmament* virtually impossible.**
  - // **Arms Control very hard to archive!**

## Conclusion

- // **Military robots are here to stay**
- // Controlling UXVs a ***very hard challenge*** for Arms Control community
- // **Western states** have **technological capability** and **highest interest**
- // UVs seem **viable solution** to **current/short term military and political problems**
- // Even “**good international citizens**” with good AC record are **in favor of UVs**  
(Germany, Australia, Canada etc.)
- // **What to do?** Some suggestions...
  - // **Demystification** of UXVs: More studies on destabilizing effects, cost developments, proliferation etc.
  - // **Arms Control** rather than disarmament: CoC for UXVs use

## Still interested?

Sauer, Frank/Schörning, Niklas 2012:

### **Killer Drones – The Silver Bullet of Democratic Warfare?**

Security Dialogue 43: 4, 363-380

