



1. Introductory Remarks

Introduction to Negotiation
Prof. Dr. Michael Ambühl

1.1. Definitions

1.1.1. Negotiation

“By negotiation we mean exchanges between parties designed to reconcile their differences and produce a settlement.” (Brams 2003)

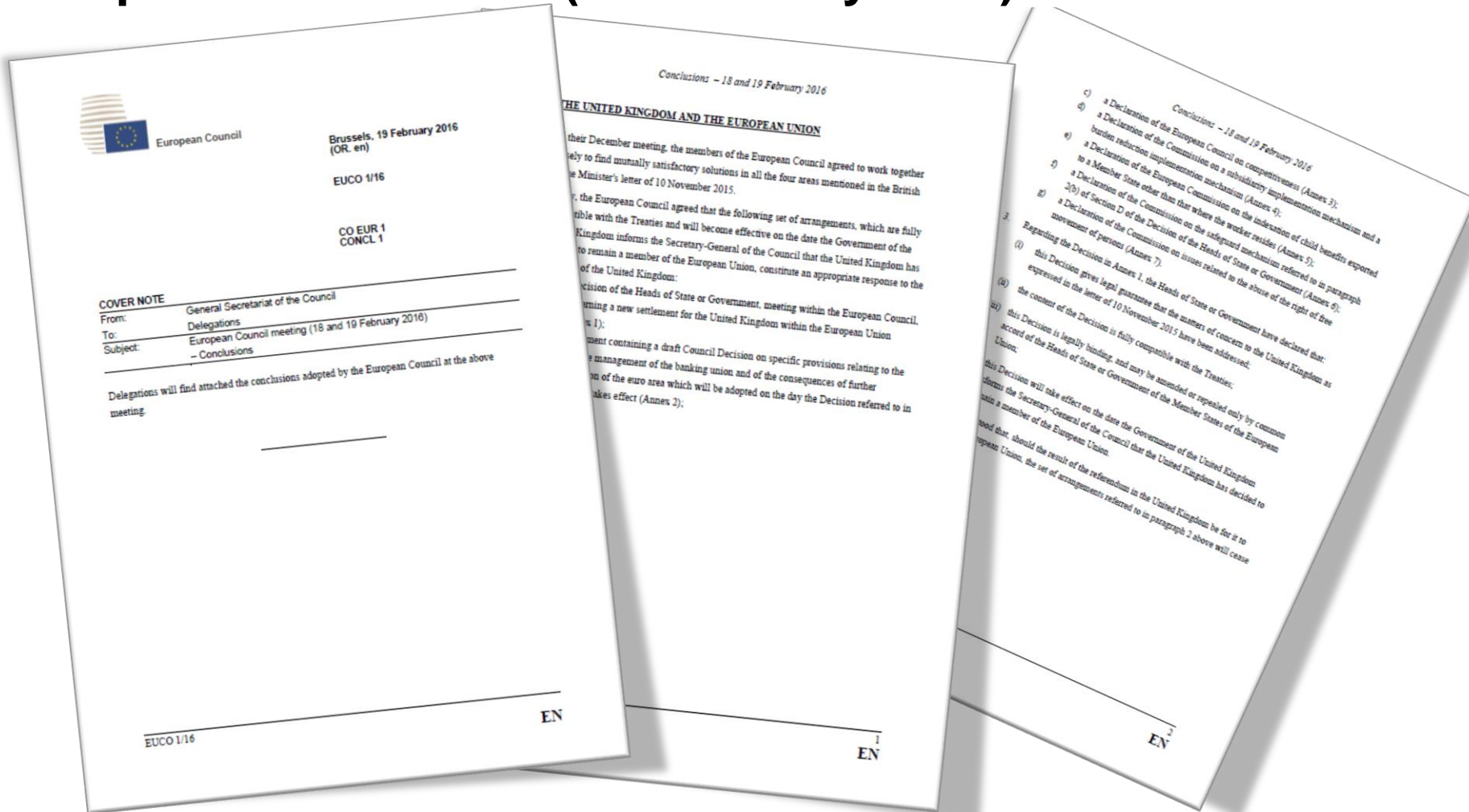
“Negotiation – a process involving multiple individuals cooperating to arrive at a joint decision. The joint decision entails joint consequences, or payoffs, for each individual.” (Raiffa 2003)

“Like it or not, but you are a negotiator. Negotiation is a fact of life. Everyone negotiates something every day.” (Fisher and Ury 2012)

Example I : Brexit Negotiations



Adopted Conclusions (19 February 2016)



COVER NOTE

From: General Secretariat of the Council

To: Delegations Subject: European Council meeting (18 and 19 February 2016) – Conclusions

Delegations will find attached the conclusions adopted by the European Council at the above meeting.

I. THE UNITED KINGDOM AND THE EUROPEAN UNION

1. At their December meeting, the members of the European Council agreed to work together closely to find mutually satisfactory solutions in all the four areas mentioned in the British Prime Minister's letter of 10 November 2015.

2. Today, the European Council agreed that the following set of arrangements, which are fully compatible with the Treaties and will become effective on the date the Government of the United Kingdom informs the Secretary-General of the Council that the United Kingdom has decided to remain a member of the European Union, constitute an appropriate response to the concerns of the United Kingdom:

- a) a Decision of the Heads of State or Government, meeting within the European Council, concerning a new settlement for the United Kingdom within the European Union (Annex 1);
- b) a Statement containing a draft Council Decision on specific provisions relating to the effective management of the banking union and of the consequences of further integration of the euro area which will be adopted on the day the Decision referred to in point (a) takes effect (Annex 2);
- c) a Declaration of the European Council on competitiveness (Annex 3);
- d) a Declaration of the Commission on a subsidiarity implementation mechanism and a burden reduction implementation mechanism (Annex 4);

e) a Declaration of the European Commission on the indexation of child benefits exported to a Member State other than that where the worker resides (Annex 5);

f) a Declaration of the Commission on the safeguard mechanism referred to in paragraph 2(b) of Section D of the Decision of the Heads of State or Government (Annex 6);

g) a Declaration of the Commission on issues related to the abuse of the right of free movement of persons (Annex 7).

3. Regarding the Decision in Annex 1, the Heads of State or Government have declared that:

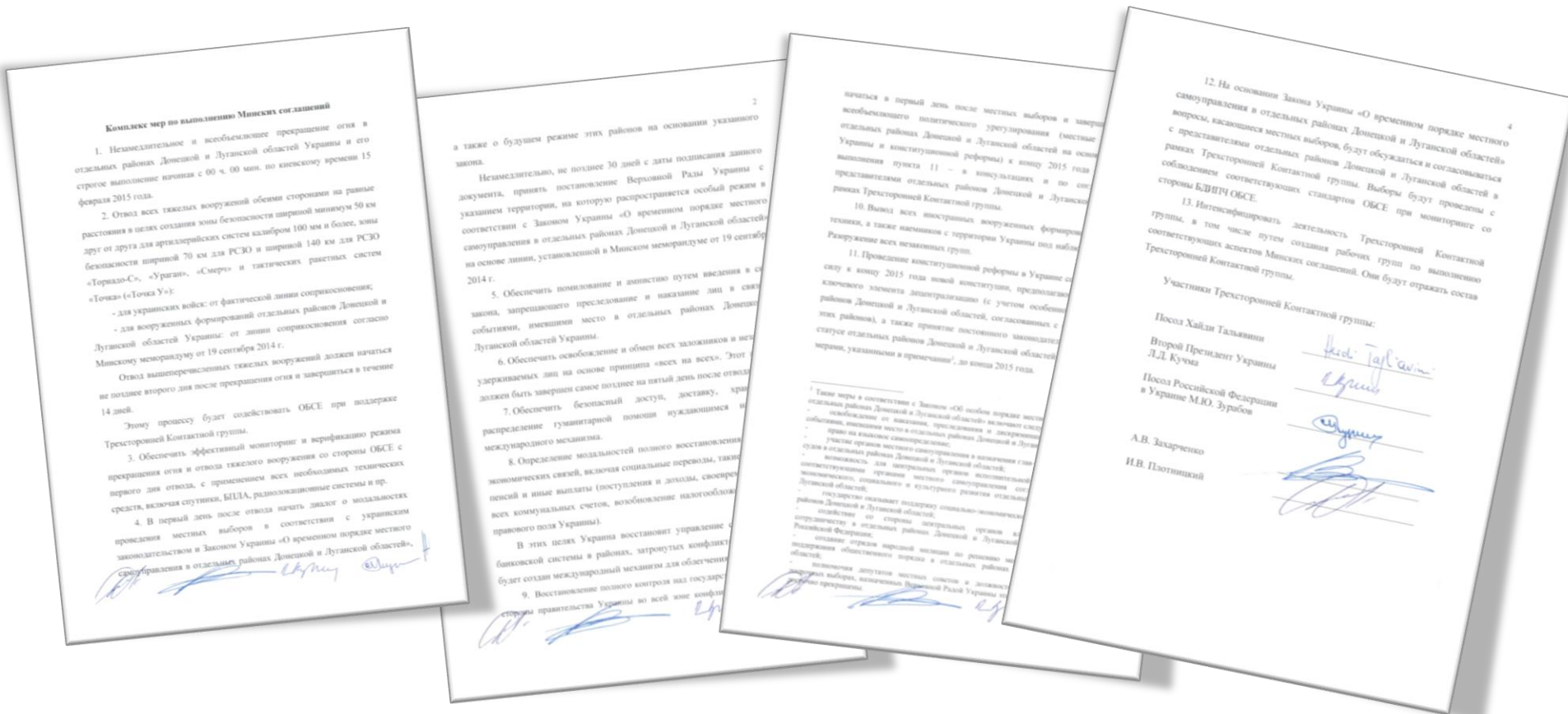
- (i) this Decision gives legal guarantee that the matters of concern to the United Kingdom as expressed in the letter of 10 November 2015 have been addressed;
- (ii) the content of the Decision is fully compatible with the Treaties;
- (iii) this Decision is legally binding, and may be amended or repealed only by common accord of the Heads of State or Government of the Member States of the European Union;
- (iv) this Decision will take effect on the date the Government of the United Kingdom informs the Secretary-General of the Council that the United Kingdom has decided to remain a member of the European Union.

4. It is understood that, should the result of the referendum in the United Kingdom be for it to leave the European Union, the set of arrangements referred to in paragraph 2 above will cease to exist.

Example II : Minsk II (12.02.15)



Protocol 12. February 2015 (“Minsk II”)



List of measures to fulfill the Minsk Agreement, February 12, 2015

1. An immediate and comprehensive ceasefire in individual areas of the Donetsk and Luhansk regions of Ukraine and its strict implementation starting at 0000 (Kyiv time) February 15, 2015.

2. The withdrawal of all heavy weapons by both parties at equal distances in order to create at least a 50 kilometer security zone for 100mm or larger caliber artillery systems, a 70 kilometer security zone for Grad multiple rocket launcher systems and a 140 kilometer security zone for the Tornado-S, Uragan, and Smerch multiple rocket launcher systems and Tochka (Tochka-U) tactical missile systems:

- for the Ukrainian troops: [withdrawal] from the actual contact line;

- for the military units of individual areas of the Donetsk and Luhansk regions of Ukraine: [withdrawal] from the contact line in accordance with the Minsk memorandum of September 19, 2014

Withdrawal of aforementioned heavy weapons shall begin no later than the second day of the ceasefire and end within 14 days.

The OSCE will contribute to this process with the support of the Trilateral Contact Group.

3. Starting the first day of such withdrawal, ensuring the effective monitoring and verification by the OSCE of the ceasefire and the withdrawal of heavy weapons with the use of all necessary technical means, including satellites, UAVs, radar systems, etc.

4. On the first day after the withdrawal, to begin a dialogue on the procedures for holding local elections in accordance with Ukrainian law and the Law of Ukraine "On a temporary order of local government in individual areas of the Donetsk and Luhansk regions," as well as on the future regime of these areas, according to this Act.

Immediately, no later than 30 days from the date of signing of this document, to adopt a resolution of the Verkhovna Rada of Ukraine with the specification of a territory subject to the special regime in accordance with the Law of Ukraine "On temporary order of local government in some regions of the Donetsk and Luhansk regions" based on the line set in a Minsk memorandum of September 19, 2014

5. To provide pardons and amnesties by the enactment of a law prohibiting prosecution and punishment of persons with regard to the events that took place in individual areas of the Donetsk and Luhansk regions of Ukraine.

6. To ensure the release and exchange of hostages and illegally detained persons based on the principle of "all for all". This process must be completed no later than the fifth day after the withdrawal.

7. To provide secure access, delivery, storage and distribution of humanitarian aid to the needy on the basis of an international mechanism.

8. Determination of the procedure for the full restoration of the socio-economic relations, including transactions of social payments, such as pensions and other payments (takings and income, timely payment of all utility bills, renewal of taxation within Ukraine's legal framework).

To this end, Ukraine shall regain control over the segment of its banking system in conflict-affected areas, and an international mechanism to facilitate such transfers will probably be created.

9. Restoration of full control over the state border of Ukraine by Ukraine's government throughout the whole conflict area, which should begin on the first day after the local elections and be completed after a comprehensive political settlement (local elections in individual areas of the Donetsk and Luhansk regions on the basis of the Law of Ukraine, and a constitutional reform) by the end of 2015, on condition of implementation of paragraph 11 - with consultations and in agreement with the representatives of individual areas of the Donetsk and Luhansk regions in the framework of the Trilateral Contact Group.

10. The withdrawal of all foreign armed forces, military equipment, as well as mercenaries from the territory of Ukraine under the supervision of the OSCE. Disarmament of all illegal groups.

11. Conducting constitutional reform in Ukraine, with the new constitution coming into force by the end of 2015, providing for decentralization as a key element (taking into account the characteristics of individual areas of the Donetsk and Luhansk regions, agreed with representatives of these areas), as well as the adoption of the permanent legislation on the special status of individual areas of the Donetsk and Luhansk regions in accordance with the measures specified in Note [1], until the end of 2015. (See Notes)

12. On the basis of the Law of Ukraine "On temporary order of local government in individual areas of Donetsk and Luhansk regions" the questions regarding local elections shall be discussed and agreed with the individual areas of the Donetsk and Luhansk regions in the framework of the Trilateral Contact Group. Elections will be held in compliance with the relevant standards of the OSCE with the monitoring by the OSCE ODIHR.

13. To intensify the activities of the Trilateral Contact Group, including through the establishment of working groups to implement the relevant aspects of the Minsk Agreement. They will reflect the composition of the Trilateral Contact Group.

Notes:

Such measures, in accordance with the Law "On the special order of local government in individual areas of the Donetsk and Luhansk regions," include the following:

- Exemption from punishment, harassment and discrimination of persons associated with the events that took place in individual areas of the Donetsk and Luhansk regions;
- The right to self-determination with regard to language;
- Participation of local governments in the appointment of heads of prosecutors' offices and courts in individual areas of the Donetsk and Luhansk regions;
- The possibility for the central executive authorities to conclude agreements with the relevant local authorities on economic, social and cultural development of individual areas of Donetsk and Luhansk regions;
- The state shall support socio-economic development of individual areas of Donetsk and Luhansk regions;
- Assistance from the central government to cross-border cooperation between the individual areas of the Donetsk and Luhansk regions and regions of the Russian Federation;
- The creation of people's militia units [police] upon the decision of local councils in order to maintain public order in individual areas of the Donetsk and Luhansk regions;
- The powers of local council deputies and other officials elected in snap elections, appointed by the Verkhovna Rada of Ukraine according to this law, cannot be terminated.

The document is signed by the members of a Trilateral Contact Group:

[OSCE] Ambassador Heidi Tagliavini, Second President of Ukraine L.D. Kuchma

The Ambassador of the Russian Federation to Ukraine M.Yu. Zurabov

A. V. Zakharchenko, I. V. Plotnitsky

<http://www.unian.info/politics/1043394-minsk-agreement-full-text-in-english.html>

Example III : Buying a car



Example IV : Planning vacations



What is common to the negotiations?

- There are **2** or more parties (special case: **1** person against “nature”)
- Conflict of needs
- Choice
- Give-and-take process
- Prefer to negotiate rather than to “fight openly”
- “Tangibles” and “intangibles” [“Materielles”, “Immaterielles”]

When should people not participate in negotiation?

- No willingness to make concession
- Demands are unethical (exceptions possible)
- The other side acts in bad faith (exceptions possible)
- You are not prepared (exceptions possible)

1.1.2. Mediation

“Any action taken by an actor that is not a direct party to the crisis, that is designed to reduce or remove one or more of the problems of the bargaining relationship, and therefore to facilitate the termination of the crisis itself.”

(Oran Young)

Example V

Lufthansa hat die
Empfehlung des Schlichters
Gunter Pleuger
angenommen.



Lufthansa hat die Empfehlung des Schlichters Gunter Pleuger angenommen.

Foto: Arne Dedert

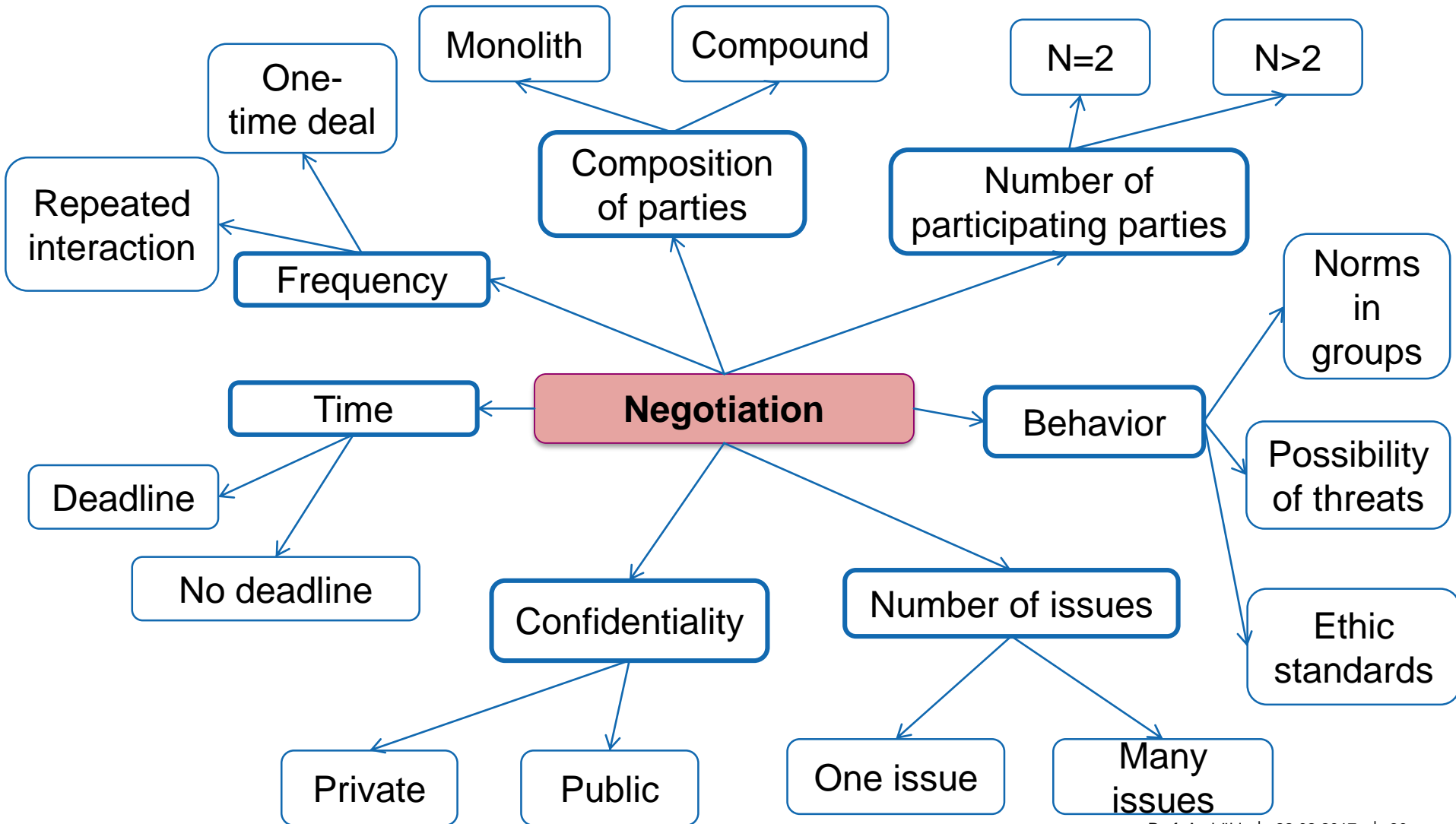
Generalanzeiger Bonn, 15.2.2017

Example VI: Good offices (of a third party)



1.2. Taxonomy (Negotiation)

1.2.1 General



1.2.2. Specific

Distributive negotiation is a competitive negotiation over one issue, a win-lose situation, such as haggling over a price in a bazaar.

Integrative negotiation is a negotiation that can look for win-win solutions or problem solving in order to have mutual gain.

Negotiation

```
graph TD; A[Negotiation] --> B[Competitive<br/>One issue<br/>Win-lose approach<br/>→ Distributive negotiation]; A --> C[Mutual gains<br/>Many issues<br/>Win-win approach<br/>→ Integrative negotiation];
```

- Competitive
 - One issue
 - Win-lose approach
- Distributive negotiation

Distributive negotiation

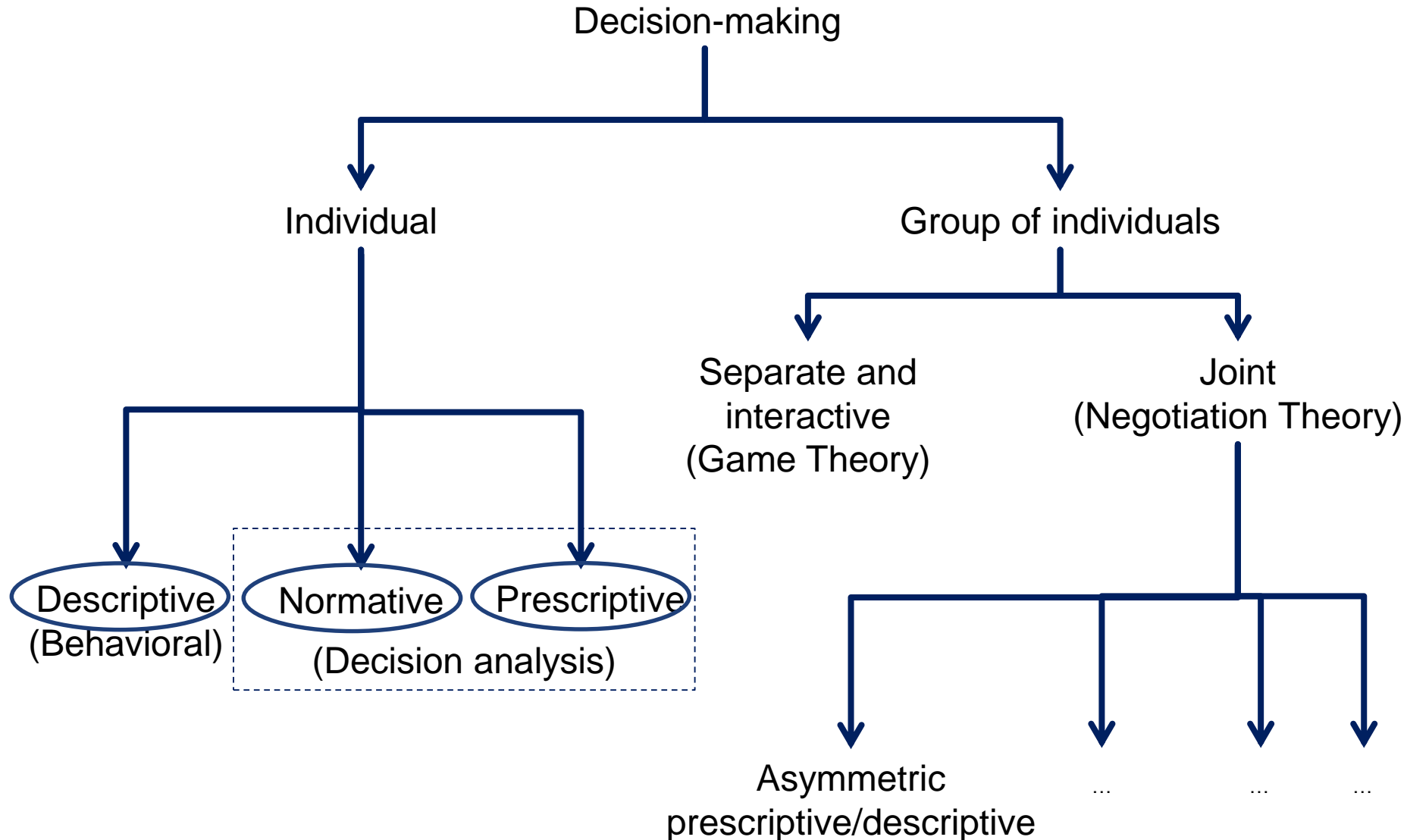
usually involves a single issue – a “fixed-pie” – in which one person gains at the expense of the other. For example, haggling over the price of a rug in a bazaar is a distributive negotiation.

- Mutual gains
 - Many issues
 - Win-win approach
- Integrative negotiation

Integrative Negotiation

outcomes available are no longer a “fixed-pie” divided among all parties. An agreement can be found that is better for both parties than what they would have reached through distributive negotiation.

1.1.3 Negotiation and decision-theory



Descriptive, normative, and prescriptive orientations

- **Descriptive:** How decisions are made. How and why individuals think and act the way they do.
- **Normative:** How decisions should be made. How idealized, rational, super-intelligent people *should* act. Often used in applied mathematics because concept is clear. However, normative theories → often only first-order approximations of real-world behavior.
- **Prescriptive:** How decisions could be made better. What *can* a real person actually do to make better decisions? What is practically useful?

1.3 Rationality

1.3.1 Definitions

a : action $\in A$ (set of alternative actions)

ω : outcome

u : utility

A utility function is a function $u: \Omega \rightarrow \mathbb{R}$ such that:

$$\begin{aligned} u(\omega_1) > u(\omega_2) &\Leftrightarrow \omega_1 \succ \omega_2, \\ u(\omega_1) = u(\omega_2) &\Leftrightarrow \omega_1 \sim \omega_2. \end{aligned}$$

A payoff function is a function $\pi: A \rightarrow \mathbb{R}$

λ is a lottery, a set of probabilities for the occurrence of every $\omega \in \Omega$.

For the probability that outcome ω occurs in lottery λ we denote $p(\omega|\lambda)$.

Expected utility (expected payoff):

$$\pi(a) = \sum_{\omega \in \Omega} p(\omega|\lambda(a)) \cdot u(\omega)$$

(with $\lambda(a)$ denotes a lottery chosen by selecting action a)

Often used definition of rationality

An individual is **rational under certainty** if his preferences for outcomes $\omega \in \Omega$ satisfy the following conditions:

- 1) Completeness: **Either** $\omega_1 \succcurlyeq \omega_2$ **or** $\omega_2 \succcurlyeq \omega_1$
- 2) Transitivity: **If** $\omega_1 \succcurlyeq \omega_2$ **and** $\omega_2 \succcurlyeq \omega_3$, **then** $\omega_1 \succcurlyeq \omega_3$

An individual is **rational under uncertainty** if his preferences for lotteries satisfy the following conditions:

- 1) Completeness: **Either** $\lambda_1 \succcurlyeq \lambda_2$ **or** $\lambda_2 \succcurlyeq \lambda_1$
- 2) Transitivity: **If** $\lambda_1 \succcurlyeq \lambda_2$ **and** $\lambda_2 \succcurlyeq \lambda_3$, **then** $\lambda_1 \succcurlyeq \lambda_3$
- 3) Monotonicity: **If** $\lambda_1 \succ \lambda_2$ **and** $q_1 > q_2$, **then** $q_1 \lambda_1 + (1 - q_1) \lambda_2 \succ q_2 \lambda_1 + (1 - q_2) \lambda_2$
- 4) Continuity: **If** $\lambda_1 \succcurlyeq \lambda_2$ **and** $\lambda_2 \succcurlyeq \lambda_3$, **then** there exists a probability q such that $\lambda_2 \sim q \lambda_1 + (1 - q) \lambda_3$
- 5) Independence: **If** $\lambda_1 \succ \lambda_2$, **then** $q \lambda_1 + (1 - q) \lambda_3 \succ q \lambda_2 + (1 - q) \lambda_3$



Not very useful in practice.
Test is not possible!

On transitivity

- In mathematics, a **relation** R is used to describe certain properties of things.
- Formally, a relation is a set of n -tuples of equal degree. Thus a binary relation is a set of pairs, a ternary relation a set of triples, and so forth.
- In the language of set theory, a relation between two sets is a subset of their Cartesian product.
- The use of the term «relation» is often used as shorthand to refer to binary relation.

$$A \times B = \{(a, b) \mid a \in A, b \in B\}:$$

$$R \subseteq A \times B.$$

The **relation** R is transitive if

$$\forall a, b, c \in A:$$

$$(a, b) \in R \wedge (b, c) \in R$$

$$\Rightarrow (a, c) \in R$$

1.3.2 Our definition: Rational behavior

“**Behaving rationally**” means

- the negotiation objectives are based on comprehensible motivations and
- the measures to achieve these objectives are consistent and do not violate generally acceptable conventions/customs.

1.3.3 Our hypothesis

Negotiation parties representing a big group, e.g. a state or a company, will be considered as **behaving rationally** if the negotiation is conducted/monitored

- by **professional** persons of the negotiation party
- of which a couple of persons (i.e. more than 5 persons) are not directly participating in the negotiation but work in a sort of “**back-office**” / “head-office” functions
- where the work culture permits an **internal objective/critical discussion**.

→Note: these 3 conditions are sufficient, but not necessary.

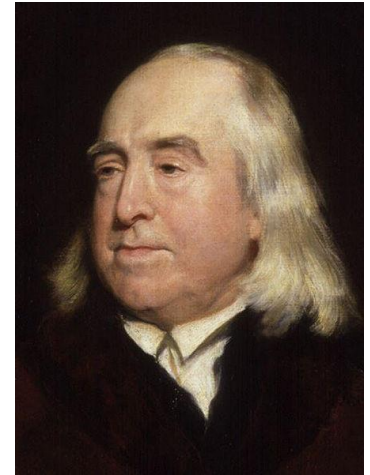
1.4 Brief excursion to philosophical concepts*

A big question of moral and political philosophy:

Is morality

- a matter of counting lives and weighing costs and benefits, depending solely on the consequences it brings about
- or are certain moral duties and human rights so fundamental that they rise above such calculations, for reasons independent of the social consequences?

Jeremy Bentham (1748 – 1832)



English moral philosopher and founder of the theory of utilitarianism:

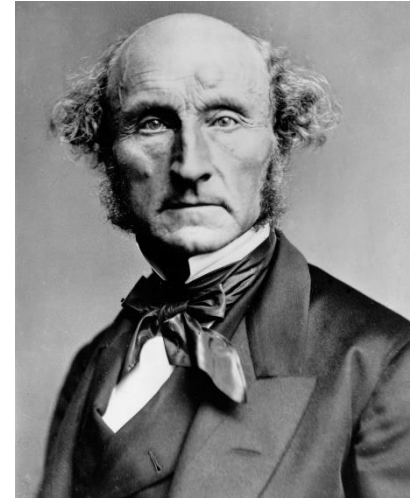
- “The highest principle of morality is to maximize happiness, the overall balance of pleasure over pain.”
- “The greatest good for the greatest number.”

Objections:

- Utilitarianism fails to respect individual rights. *Example:* Can torture be justified?
- Difficult to translate all moral goods into a single currency of value (utility function)

John Stuart Mill (1806 – 1873)

English philosopher, son of a friend of Bentham, and also an utilitarian.

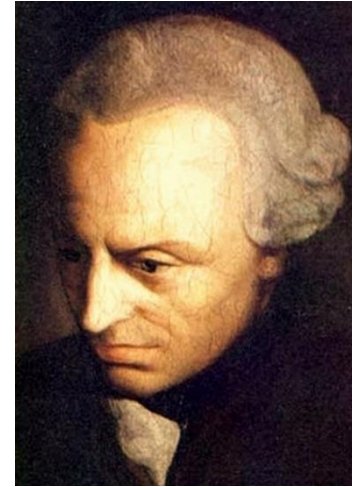


Mill tries to reconcile individual rights with the utilitarian philosophy from Bentham. He takes up the objections and “enhances” the utilitarian concept.

To defend justice and to determine the right thing you have to ask what will maximize welfare or the collective happiness of society as a whole. It is the result that counts.

Immanuel Kant (1724 – 1804)

German philosopher from Königsberg



He rejects utilitarianism:

- Only actions done due to a motive of duty (doing something because it is right) have moral worth. The moral worth of an action is dependent on the motive from which it is done, not the results it produces.
- Kant developed the Categorical Imperative (universal law): “Act only according to the maxim whereby you can, at the same time, will that it should become a universal law.”
- Test: “What if everybody did that?” *Example*: Everyone lied.

Kant was also a great Enlightenment thinker (“Aufklärer”)

“Beantwortung der Frage: Was ist Aufklärung?”


Aufklärung ist der Ausgang des Menschen aus seiner selbst verschuldeten Unmündigkeit. Unmündigkeit ist das Unvermögen, sich seines Verstandes ohne Leitung eines anderen zu bedienen. *Selbstverschuldet* ist diese Unmündigkeit, wenn die Ursache derselben nicht am Mangel des Verstandes, sondern der Entschließung und des Mutes liegt, sich seiner ohne Leitung eines andern zu bedienen. Sapere aude! Habe Mut, dich deines *eigenen* Verstandes zu bedienen! ist also der Wahlspruch der Aufklärung.

“An Answer to the Question: What is Enlightenment?”

Enlightenment is the human being's emergence from his self-incurred minority. Minority is inability to make use of one's own understanding without direction from another. This minority *is self-incurred* when its cause lies not in lack of understanding but in lack of resolution and courage to use it without direction from another. *Sapere aude!* [dare to be wise] Have courage to make use of your *own* understanding! is thus the motto of enlightenment.

Kant E.; (1785), *Beantwortung der Frage: Was ist Aufklärung?* Berlinische Monatsschrift, 2, S. 481–494

NECOM-Comment regarding the disciplines

- Game Theory
 - Operations Research
 - Negotiation Science
 - Decision Making Theory
 - ...
- 
- are fundamentally based on
utilitarian reasoning

“What is best for us?”

“What is the objective function?”

“How can we maximize the payoffs?”

“What is the best result?”

“What is best for society?”

- These questions can normally only be answered – from a scientific point of view – if you make a quantification
- In other words: define the utility for a group or an individual
- In real life other elements play a role too!