



# Training: Fundamentals of democracy

## Design document

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## 1 General concept

Freedom, for a people, for a self-conscious body politic, does not simply consist in being freed from its chains. It means being able to define its common future freely and peacefully, with the participation of all, in a "power to act" open to all. This is the very essence of **democracy**.

The aim of this course is to give the learner a **practical** experience of what democracy is, so that he or she can see the questions and problems posed by democratic public action and the responses that have been made to them over the years. The course concludes by looking ahead to the new forms that democracy is taking in the 21<sup>e</sup> century.

This is participative training, in which learners are invited to take direct action, in addition to being presented with training content, by taking part in role-playing games supervised by trainers.

The design of this participatory course was freely inspired by the exhibition "[Making things public](#)", organised by the *Zentrum für Kunst und Medien* (ZKM) in Karlsruhe (Germany)



between March and October 2005, curated by Bruno Latour and Peter Weibel, and by the participatory museum on mathematics called [Mathematikum](#) in Gießen (Germany).

The innovative nature of this participative training, and in particular of the role-playing games, means that they need to be tested before being put into service, and then adjusted during operation.

This online course could later be developed into a travelling exhibition or museum.

## 2 Two key words: Republic and Democracy

Training in the fundamentals of democracy is structured around the etymology of two key words: "**republic**" and "**democracy**", each the subject of a separate section.

The first concept, that of the republic or "public thing", raises the question of the **purpose of public action** and the exercise of power. Why should certain actions, described as 'public', be decided in the name of the collective, binding on all, instead of being undertaken privately, individually and uncoordinated? Which decisions are "public"? And why?

The second concept, that of democracy or 'people power', raises the question of the **procedures** for defining public action, and the means of involving, directly or indirectly, the widest possible range of the human and non-human entities concerned. How can we determine the political body or '*demos*' of people entitled to participate in this definition? What practical procedures and arrangements should be put in place to ensure that everyone's voice is heard and taken into account?

## 3 General organisation of the course

Training in the fundamentals of democracy is organised along a **pathway** made up of two **sections**, the "Republic" (§ 4) and "Democracy" (§ 5), each of which is divided into **sections dealing with a specific** issue. It concludes with a prospective section (§ 6), devoted to the prefiguration of democracy in the 21<sup>e</sup> century.

Each stage comprises two areas:

1. a space for **direct experimentation** by the learners, supervised by dedicated trainers. The experimentation takes the form of a participative role-playing game, followed by reflective feedback on how the game was played by the participants, with the support of the trainers.
2. a space for the **presentation of** content and documents outlining the history of the questions posed by "public affairs" and democracy, and the answers that have been given to them over time.

The course is designed to be followed in a linear fashion, visiting the two areas described above at each stage and following the stages in order. However, its architecture allows :

- o within each stage, to restrict themselves to the exhibition space only
- o at the end of each stage, to choose the next stage from all those in the section.

Direct experimentation is carried out by **groups**, whether these groups are already constituted (school groups, for example) or not (by bringing together a group of individual learners who arrive during a given period of time). Group experimentation is **essential for** teaching the fundamentals of democracy. Since democracy raises the question of action on behalf of a collective and carried out by a collective (whether identical to or different from the previous one), it is only in a group that the essential questions it raises can be made manifest and



tangible. Making decisions for oneself alone does not present any particular difficulty, and does not merit training in the fundamentals of democracy.

In the case of unformed groups, the first stage of the visit is devoted to establishing a bond of trust between people who do not know each other and to establishing a group dynamic, to "break the ice". To this end, the trainers organise a very simple, short and rather light-hearted cooperative game, asking the participants personal questions (but not too many).

## 4 Section one: The Republic

The general aim of this section is to examine the "public thing", that which comes under the heading of "public" action, defined in the name of the community and binding on it. The key concepts discussed and used in this section are :

- o externalities, which transfer an issue from the private to the public sphere (§ 4.1)
- o common problems, around the resolution of which political bodies are built (§ 4.2)
- o the two essential tools for public action, namely the law, a tool for coordinating players (§ 4.3) and taxation, justified by the existence of collective goods (§ 4.4)
- o the conditions for public action: the rule of law (par. 4.5), its radical uncertainty, which can only be resolved through argument (§ 4.6), the statistics that provide it with information (§ 4.7) and the legal texts that express it (§ 4.8).

This section does not address the question of how public action should be defined, or whether or not it should be democratic (these questions are dealt with in the section on Democracy). They are very general, and relate to all forms of collective government, whatever the degree of concentration of decision-making, and therefore whether this government can be described as monarchic (power of one), oligarchic (power of a few) or democratic (power of all).

### 4.1 Externalities: the boundary between public and private

Educational objective of this stage. Key concept to be conveyed and illustrated

The distinction between what is public and what is private is not in itself self-evident, and these conceptions vary within the same society and over the course of history. The key concept is that of **externality**. By "externality" we mean the effects of an action that are not confined to the predefined space of the actors involved in that action, and therefore spill outwards. This spillover of the consequences of the action (whatever form it takes) justifies the action being transferred from the private space (of relations between actors) to the public space. This movement can also be reversed, when we observe that actions that were thought to have consequences beyond the private sphere are no longer considered to have any (as in the case of religious practices).

#### Role play and analysis

The trainer asks the group to imagine that its members live in the same area, and that they successively learn that a local resident has the following behaviours:

- o She catches flies with flypaper
- o She reads books in a foreign language, written with unfamiliar signs
- o She catches mice with traps where the mice are immobilised in glue
- o She does smelly chemistry experiments
- o She trains her dog by beating it with a stick
- o She organises noisy, late-night receptions every month



- o She raises her children by beating them with a stick
- o She places an unknown sign outside her door
- o She doesn't look after her garden and it becomes a messy wasteland

In each case, the question is: Does this concern us? Should we do something about it? Should it be banned or regulated? Why or why not?

### Content of the presentation area

Historical examples of laws and regulations, which concerned behaviour and actions that we would find incongruous or surprising to legislate on today (illustration of the "theological-political problem"<sup>1</sup>, where the Church felt legitimate to intervene in very many aspects of life, including private life according to our contemporary conceptions, But this was justified by the conviction at the time that the piety of each individual was a determining factor in world and social order, and therefore in preventing disasters interpreted as divine sanctions), as well as examples of regulations that are entirely contemporary and current (on the welfare of farm animals, for example).

The question of how to match the competences of a public institution with territorial responsibility to the area of diffusion of the externalities it is charged with regulating: a feeling of powerlessness when the decision is taken on a small scale but the necessary coordination, because of the geographical extent of the externalities, is on a larger scale. Examples include urban agglomerations, continental political unions (particularly in Europe), and common global problems (climate).

## **4.2 Common problems at the source of political bodies**

### Educational objective of this stage. Key concept to be conveyed and illustrated

Public action is concerned with **common issues**, i.e. problems that fall within the public sphere because their externalities have spilled over from the private sphere - or are thought to have done so. Even if people do not know each other, even if they are enemies, the fact that they are brought together to resolve a common problem is the first stage in the formation of a body politic<sup>2</sup>, based on the constitution of a "public" in the sense of John Dewey<sup>3</sup>.

The common problems fall into three main categories, each of which is the subject of a separate stage in the remainder of this section: the management of common infrastructures and resources (corresponding to this chapter), the definition of rules and agreements enabling the coordination of players (§ 4.3), sharing the costs of maintaining community assets (§ 4.4).

### Role play and analysis

Or else:

- o a collaborative role-play, in which the group must collectively carry out a task that none of the participants can solve alone
- o a water delivery pipe, where the inflow rate varies randomly over time, and where each person must maintain the water level in their reservoir between a low limit and a high limit, while the outflow rate from their reservoir also varies randomly over time.

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<sup>1</sup> Manent, P.: "*Histoire intellectuelle du libéralisme*" Hachette, Collection Pluriel, Paris, 1997.

<sup>2</sup> Marres, N.: "*Issues spark a public into being. A key but often forgotten point of the Lippmann-Dewey debate*" in Latour, B. and Weibel, P. editors, "*Making things public. Atmospheres of Democracy*" MIT Press, Cambridge, Massachusetts, USA / London, United Kingdom, 2005.

<sup>3</sup> Dewey, J. "*The public and its problems*", Ohio University Press, 1989



At each stage, the control system switches the water between use for the individual and use for others downstream.

In both cases, agreement had to be reached to regulate the actions of the members of the group, to solve the common problem together (carrying out the common task or ensuring that everyone had a sufficient supply of water). The process of reaching agreement among a number of people on a joint action to resolve a common public problem is the essence of politics, of action relating to the "public good".

#### Contents of the presentation area

International management of water, rivers and climate.

Epidemics within and between countries.

Luxury and waste. Misery.

The public actions and institutions set up historically to deal with these common problems.

### **4.3 Efficient and fair coordination of players: agreements**

#### Educational objective of this stage. Key concept to be conveyed and illustrated

For humans to interact and **coordinate with each other** peacefully and productively, they need to know what to expect from each other, what anticipations to have. To this end, the historically most effective way is to define stable, predictable and fair **conventions** between humans: laws, rules and regulations, in both the public and private spheres<sup>4</sup>.

#### Role play and analysis

The group is divided into N teams (N = 3 to 7). Each of these N teams is collectively given P tokens of different colours taken from 4 (blue, green, yellow, red) distributed unevenly between the colours, and each team is completely deprived of tokens of at least one colour. The participants do not know the total number of chips of each colour. The aim of the game is to get as many complete sets of 4-colour chips as possible for your team, by exchanging chips with the other teams.

A round of the game consists of a phase in which the exchange conventions between coloured chips are defined and a phase of negotiations and transactions. An exchange convention is the "exchange rate" between tokens of different colours: for example, team A exchanges 1 blue token for at least 3 green tokens, but this convention may conflict with that of team B which, in the other direction, wants to obtain at least 2 blue tokens in exchange for the 3 green tokens. In the first phase, each team defines an exchange agreement between tokens of different colours and, in the second phase, sends a merchant to exchange a set of tokens with each of the other teams. Each team keeps a record of the exchange agreements between chip colours for each round. Each merchant from one team meets the merchant from another team, and carries out the transactions as best he can, according to the conventions that the team has set itself, but also according to the wishes of the merchant from the other team. The negotiation-transaction phase is short, lasting around 1 minute, to encourage people to conclude quickly whether they agree (in which case they exchange tokens according to the exchange terms they have agreed) or not (in which case everyone keeps their tokens). After each negotiation-transaction phase, the merchants return to their teams to share the tokens,

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<sup>4</sup> Eymard-Duvernay, F., Favereau, O., Orléan, A., Salais, R. and Thévenot, L. (2004), "Valeurs, coordination et rationalité. L'économie des conventions ou le temps de la réunification dans les sciences économiques, sociales et politiques", *Problèmes économiques*, vol. 2838, pp. 1-8



discuss new exchange agreements and appoint new merchants to interact with each of the other teams. The game consists of 4 rounds.

The game is then repeated once, but this time all the participants know the total number of tokens of each colour, and establish a common exchange convention before the tokens are allocated to each team. Then the teams swap again.

During the debriefing phase, the players observe : (1) the variation in the conventions for exchanging tokens over time for each team; (2) that in some cases, they were unable to agree to exchange because the conventions were too different from one team to another, each considering that the other was unfair in its claims; (3) that when a common convention can be established beforehand, all the transactions are more efficient (more complete sets of 4 tokens are assembled in total), quicker and conflicts are less acute and fewer in number.

Contents of the presentation area

Common social conventions: language, highway code (and the side of the road on which you drive), criminal laws. Rules at all levels: in a building, an association, a company, a branch of industry, a municipality, a region, a State, the European Union, the United Nations.

The consequences of the absence of law: historical examples of the absence of a legal system where the sovereign decides on disputes without feeling bound by anything, either by precedent or by written law (Holy Roman Empire before the *Reichskammergericht*).

The tools needed to ensure that the law and conventions are effective: the rule of law, the State's monopoly on law enforcement, the judiciary.

**4.4 Public goods and taxation**

Educational objective of this stage. Key concept to be conveyed and illustrated

When **goods** are **collective**, or non-excludable and non-rivalrous (i.e. no one can be prohibited from enjoying them as soon as they exist, and the fact that one person enjoys them does not deprive others of the same enjoyment), the only way to ensure that the production of this good will receive the necessary resources is through **coercion** by a superior body, i.e. **taxation** by the State.

Role play and analysis

Each of the N participants receives a random number of "gold coins" and "silver coins" (with the convention: 1 gold coin = 2 silver coins). The sum received is between 1 and 20 gold coins (with a non-uniform probability distribution with a fairly low peak density and a long tail), and with an average of 4 "gold coins" per person and a minimum of 1. The characteristics of this random distribution are not communicated to the participants. The "gold coins" can be used at each stage to (1) buy goods for oneself and one's family or (2) contribute to the annual maintenance of a dyke that protects the village against flooding from the nearby river.

Depending on how much money she has for herself and her family at the end of the round (after paying for the upkeep of the dyke), each player earns points corresponding to the satisfaction she derives from her lifestyle, as shown in the table below.

<b>Number of gold coins remaining</b>	1	≥1,5	≥2	≥4	≥6	≥8	≥13	≥20
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<b>Points</b>	0	1	2	3	4	5	6	7
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*(The number of points is equal to  $5 \cdot \log_{10}$  (pieces))*

However, if the dyke is not maintained, the village is flooded that year, and everyone's individual wealth is washed away: everyone ends up with just 1 gold coin, or 0 points. The annual cost of maintaining the dyke is  $2N$  "gold coins".

Several protocols are used successively to pay for the annual maintenance of the dyke:

1. each person's allocation of "gold coins" is secret, and each person secretly puts the number of "gold coins" they want into the ballot box for building the dam, and also keeps secret the number of "gold coins" they have left over for personal consumption and savings. She shows the image corresponding to her personal consumption and lifestyle (before any flooding).
2. each person's endowment of "gold coins" is made public, and each person secretly puts the number of "gold coins" they wish into the ballot box for the construction of the dike, and also keeps secret the number of "gold coins" they have left for their personal consumption and savings. She shows the image corresponding to her personal consumption (before any flooding).
3. each person's endowment of "gold coins" is made public, and each person, in random order of appearance, puts as many "gold coins" as they wish into the ballot box for the construction of the dam. The number of gold coins remaining for personal consumption and savings is then deducted.
4. each person's endowment of "gold coins" was made public, this time with a very unequal distribution law separating a small group of "very rich" people (10%) receiving more than 12 gold coins and a very large group of "poor" and "very poor" people receiving 1 to 2 gold coins. The trainer first asks the "very rich" what rule they would apply to share the costs of maintaining the dam, then asks the "poor" and "very poor". She then draws lots to decide which rule will be applied (the question of how to define the taxation rule is not the subject of this section, and is therefore left out here; it will be dealt with in the next section on Democracy).
5. Each participant's endowment of "gold coins" was made public, with a more egalitarian distribution than previously (no participant received more than 8 gold coins). The trainer first asks the "richest" participants (who receive 5 gold coins or more) what rule they would apply to share the costs of maintaining the dam, and then asks the "least rich" participants (the others). She then draws lots to decide which rule will be applied (after all, we're not supposed to be in a democracy in this section).
6. the participants decide together, before receiving the "gold coins", which rule will be applied to pay for the annual upkeep of the dyke.

At the end of each protocol, the trainer counts up the "gold coins" available for the construction of the collective asset, and the conclusions are drawn: if they are insufficient, the dike will not be maintained this year, and the village will be flooded. The way of life of everyone (including the richest) is therefore compromised.

The participants were invited to observe that in the absence of coercion by a collective body, the dyke is not maintained because spontaneous payments are insufficient, and that therefore even if private property is present, this is not enough to ensure prosperity (since if the dyke is not maintained, it is washed away by the flood). They also see that the issue of taxation is not easy to resolve fairly, and that opinions on fairness differ, and that the conflict is all the harder the more unequal and separated the social groups are.



### Contents of the presentation area

The notion of collective good and canonical examples: irrigation systems and dykes, the army, justice. Experiments on the payment behaviour of collective goods in the literature (and the cumulative results of the role-playing game).

The effects of economic inequality on social cohesion and the willingness to pay tax.

Elements for analysing a public budget: overall amount of expenditure and revenue, deficit or surplus, debt, nature of expenditure, nature of taxes (base, rates). Consequences of the choices made for each of these parameters.

## **4.5 The rule of law**

### Educational objective of this stage. Key concept to be conveyed and illustrated

A public action can only be brought if the decisions concerning public matters defined above (in § 4.3 and § 4.4 respectively), laws and the public budget, are effectively respected. These conditions are described as forming the **rule of law**.

They include :

- o the protection of the weak against the powerful, the violent and the clever, by a **public force that** effectively has a monopoly on the legitimate use of force
- o **legislation** (laws, regulations, case law) that is understandable and **accessible** to everyone
- o a **universally** applicable right, with no exceptions or privileges
- o a judicial institution that is **independent of** power and pressure, ensuring **fair** trials
- o an efficient and fair **tax** system, ensuring that tax is actually paid and that individuals and legal entities contribute according to their ability to pay
- o **control of public spending** and assurance that it is used in accordance with defined objectives.

### Role play and analysis

By way of exception to the general organisation described in §. 3 this stage does not include role-playing. Indeed, subjecting visitors to the concrete experience of arbitrariness, violence and injustice would be contrary to the ethical and deontological objective of the training.

### Contents of the presentation area

The exhibition uses historical and contemporary examples to illustrate what the **absence of** each of the facets of the rule of law described above means in practice: violent anarchy, the stranglehold of organised crime, inaccessibility of the law (linguistic, cultural or financial), corruption or subjugation of the justice system, tax evasion, misappropriation of public funds.

## **4.6 The radical uncertainties of public action and argumentative discussion**

### Educational objective of this stage. Key concept to be conveyed and illustrated

Public action cannot be decided on the basis of independent, objective criteria that are binding on everyone and that are of the order of science or truth. Indeed, when a community commits itself to an **action that is** irreversibly part of history (and without the possibility of compensating for the consequences of a negative but improbable result by repeating the trials,





as would be the case in a game of chance), there are questions that cannot be answered with certainty and indisputability:

- o what are the priority goals to be achieved, the most important problems to be solved?
- o Is the information we have sufficient to act now, or is it preferable to take the time to gather more, or to let the situation take its spontaneous course, at the risk of missing the opportune moment?
- o what are the foreseeable consequences of the action, given the current state of knowledge, and how can we assess them, given that they relate to different and heterogeneous fields, timescales and stakeholders, and that they cannot be reduced to a single "optimisation" scale?

In the face of this **radical uncertainty** about the problems to be solved, the future consequences of actions and the way in which they will be judged, the only legitimate way to make a decision is through a **reasoned discussion**<sup>5</sup> between the people responsible for the decision. The purpose of this reasoned discussion is to :

- o **convincing** and **being convinced**, i.e. freely changing one's opinion on the action to be taken, as a result of new information or new ways of looking at the information available
- o generate **new alternatives for** action and compromises to deal with the common problem, taking into account the opinions and interests of the participants, present or represented
- o **take a step back from** his own self-interest, by placing himself mentally in the position of a co-sovereign responsible for the common good, i.e. the well-being of the body politic as a whole.

This radical uncertainty leads us to re-evaluate the role and qualities of the politician: he or she has neither knowledge nor exceptional skills that are inaccessible to the ordinary person, but is the one who takes the decision in a situation of uncertainty (having, where necessary, called on the competent partners and got them to work together), and then assumes responsibility for it.

### Role play and analysis

A construction kit containing, for each team :

- o building materials :
  - 8 spaghetti
  - 1 ball of modelling clay, 1 cm in diameter
  - 5 square elastic bands, 1 mm square and 5 cm in diameter
  - 50 cm of 0.5 mm diameter string
  - 1 sheet of 80g paper / m<sup>2</sup> , A4 format (sheet for photocopier / printer)
- o the tools :

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<sup>5</sup> Habermas, J., *Moralbewusstsein und Kommunikatives Handeln*, Frankfurt/Main: Suhrkamp, 1983. Furthermore, mathematical considerations relating to the aggregation of individual preferences into a collective preference (Arrow-Debreu theorem, work by A. Sen) are of little relevance here. Indeed, they assume the absence of communication between members of the body politic and the exhaustion of the generation of new alternatives. They are therefore placed in the very specific case of a choice between a finite and unmodifiable number of mutually exclusive alternatives.



- 1 pair of round-tipped scissors
- 1 double decimetre
- a 4-step calculator.

Working on this construction set leads to uncertainties or difficulties similar to those encountered when working on society or the economy: one part behaves in a familiar and known way (the elastic bands, the string); another part behaves in a way that is unknown, or about which there are uncertainties (the mechanical strength of the spaghetti, the adhesion of the modelling clay); experiments can be carried out - but this requires time and resources; some actions are irreversible (cutting the paper or the string).

The trainers set up the teams (4 to 6 people per team), then give each team a construction kit. They then set out the instructions: each team must use the kit to build an object in less than 15 minutes that occupies the largest possible volume (surface area of the base x height) and lasts for at least 30 seconds. An "object" is defined as a set of elements that are in contact with each other. The team that builds the object that occupies the largest volume wins.

The trainers point out that the debate centred on the objective to be pursued (to build high or to build wide), that time was short, that the behaviour of certain elements had been anticipated, but that others were surprising, that a decision had to be made without knowing what was really going to happen, while at the same time being pressed by the negative consequences of inaction - and that this is the situation of any decision to take action. They also show the nature of the argumentative discussion: what arguments were exchanged, who changed their opinion, what new alternatives were generated, how the general interest was considered over and above individual preferences for caution or daring, for building high or wide.

#### Contents of the presentation area

Theories of discussion: Habermas.

For the following historical events, describe the terms of the decision and the result actually achieved, showing that it was not obvious *a priori*:

- o Invasion of Sicily by the Athenians during the Peloponnesian War.
- o Nelson Mandela chose to support the South African national rugby team during the 1994 World Cup ("*Invictus*" film).
- o Economic choices during German reunification (rapid economic and monetary integration, exchange rates).
- o Atomic bombing of Japan in 1945.

Illustrations of the conflicts intrinsic to the decision to take action: safety/risk-taking, short term/long term.

### **4.7 Statistics: the knowledge needed for public action**

#### Educational objective of this stage. Key concept to be conveyed and illustrated

When you want to take action on an object as large as a city, a region, a state or a union of states, you need to **represent** this object in a simple way, using **digital** tools that both schematise and make accessible the quantities that you then want to work on, and with the idea that these quantities require definition and then data collection beforehand.

#### Role play and analysis



The problem posed is to define the **minimum** number of lifeboats required for the passengers on a boat, based on quantitative knowledge of the passenger population. This situation is analogous to that of an administration that has to size facilities for its population on the basis of its quantitative description. These passengers are represented by plastic sticks of 3 colours (white, brown, black), different sizes (small and large) and shapes (round or square). What's more, some of these sticks float and others sink when placed in the water, but the difference in mass is quite small and therefore not directly perceptible. The lifeboat model is shown, with as many square compartments as round ones. The round rods fit into the square housings, but are housed in them without being attached. In the other direction, the square sticks do not fit into the round compartments.

In the first stage, the trainer asks the group to describe the group of passengers quantitatively, and to choose the characteristics they consider relevant for describing the passenger population.

The question of the minimum number of canoes required is then raised in the following scenarios:

- o without any information
- o it is specified that the sea is calm (which means that you can put round sticks in square housings, even if they are not firmly fixed in place)
- o it is specified that the sea is calm and warm enough for people who can swim to be able to stay there long enough to wait for help (which means that round sticks can be placed in square accommodation and that there is no need to provide a dinghy for floating sticks).

In each case, the trainers asked the group how the participants had counted the characters and what rules they had adopted to determine the number of canoes needed. The trainers point out that the question of whether or not the sticks float was not obvious at the outset, and that the description of the population given at the start included criteria (colour and size) which are ultimately irrelevant to the action under consideration (the sizing of lifeboats), and that the criteria for observing the population had to be adapted to the nature and circumstances of the public action on which we wish to act.

#### Contents of the presentation area

The information gathered in a population census. The wide range of uses to which this information can be put by public authorities.

The representation and transmission of statistical information (work by Otto Neurath in particular ).<sup>6</sup>

### **4.8 Legal texts: tools for public action**

#### Educational objective of this stage. Key concept to be conveyed and illustrated

The bodies responsible for acting on behalf of the community (from the municipality to the European Union and beyond) act mainly through **legal texts**. To be effective, these texts must be precise, universal and neutral, which are difficult to achieve.

#### Role play and analysis

1. Two members of the group go outside. The others write a text describing how to draw a cat (for example) by assembling ovals, circles, sticks and triangles from a given drawing.

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<sup>6</sup> Examples of his work can be seen at <https://www.isotyperevisited.org/> and at the Austrian Museum for Society and Economy (*Österreichisches Gesellschafts- und Wirtschaftsmuseum*) in Vienna.



However, the group is not allowed to use the word "cat" or equivalent, and must describe the drawing sequence in a text, specifying the elementary shapes to be used, their respective positions and sizes, etc. Then the 2 members of the group who had stayed outside are brought in, and they draw, without seeing each other (for example, on opposite sides of a large panel), following the instructions written by the group. When they have finished, we compare the results.

The trainer points out how difficult it was to specify in a single text what needed to be done, and that the people to whom the text was addressed each understood it in their own way.

2. Two members of the group leave. The others write a text forbidding them to carry out certain actions, the area of validity of which extends into the space between 2 lines drawn on the floor about 2 metres apart and crossing the whole room, separating the door behind which the 2 people have stayed from a goal to be reached. The text can only describe movements of parts of the body, and cannot use synthetic words such as "walking" or "running", or to do so must define them by movements of parts of the body. His intention is to prevent people from achieving the set goal. Then the 2 members of the group who had stayed outside are brought in, and given the rule to follow in the area between the 2 lines, while telling them that their aim is to achieve the goal, and that everything that is not explicitly forbidden in the text is allowed.

The trainer points out how difficult it was to specify in a single text what was prohibited, and that the people to whom the text was addressed found very imaginative ways of getting round it to their advantage.

#### Contents of the presentation area

Examples of contemporary legal texts illustrating different forms of public action: authorising, prohibiting, prescribing, advising. These texts are given in their full, long version, with a justification given for the presence of each new paragraph, drawn from an analysis by a legal expert of the recitals and parliamentary debates leading up to the adoption of the text.

## **5 Second section: Democracy**

The general purpose of this section is to explore the concrete and procedural conditions of democracy, i.e. of "power distributed throughout the people". The "power" in question is the power to act, to actually engage in the public actions set out in the section on the "Republic". The "people" (*demos*) is understood here as all the members of the political community concerned by the common issues and problems which public action seeks to address. The fact that power is "distributed" means that it is not concentrated in one person or in a small closed group.

After the section on the 'Republic', which helps us to understand its purpose, 'what' it is about, this section on 'Democracy' helps us to see 'how' public action is defined by ensuring its democratic nature, i.e. by involving the greatest possible number of people.

The essential concepts presented and used in this section are :

- o the three stages in the collective definition of public action: initiative, amendment, decision (§ 5.1)
- o the "*demos*" (§ 5.2), legitimate for defining public action in a democracy
- o the conditions necessary for the argumentative discussion leading to the definition of public action to be open to the whole '*demos*': respect for human rights (§ 5.3), the



existence of 'public spheres' for discussion (§ 5.4), access to education (§ 5.5) and available time (§ 5.6)

- o representation and its crisis (§ 5.7).

### 5.1 The 3 stages in the collective definition of public action: initiative, amendment, decision

Educational objective of this stage. Key concept to be conveyed and illustrated

The process of collectively defining public action involves three very distinct stages: **initiating** the proposal for public action (which amounts to defining the agenda of the bodies responsible for defining public action and formulating an initial version of the proposal), **amending** the proposal and **deciding** between alternative proposals. These three stages are present as soon as the definition of public action is collective, even if the collectivity defining the action is much smaller than the "demos" as a whole, and therefore even if the government is oligarchic. Power need only be concentrated at one of these stages for it to constitute the lock controlling the whole process and limiting its democratic character. Conversely, for the process of defining public action to be able to claim to be democratic, power must remain broadly distributed throughout these 3 stages, and include phases of reasoned discussion.

#### Role play and analysis

First, the trainer draws lots to determine which participant will have the monopoly on initiative: she is the only one who has the right to suggest that we discuss a common problem.

The trainer then gave the other participants a set of cards, each containing a major contemporary cause, in the form of a common problem. She asked each participant to choose the card she felt closest to, the one she wished to defend.

The participant with the monopoly on initiative has the right to freely choose 3 common problems that she considers important from among those presented by the other participants. The other participants have a total of 5 minutes to try to convince her to choose the common problem for which they are responsible. The participant with the monopoly on initiative then makes public the list of 3 common problems that she has chosen because she considers them important.

The trainer then pointed out how hard the struggle to be heard by the participant with the monopoly on initiative had been, and how frustrating it had also been for those who ultimately could not be heard or were not followed.

For each of the 3 common problems on the list thus chosen, the trainer asks participants to vote immediately for or against the public action that seeks to respond to it, as shown in the table below, without the possibility of modifying them (they are "take it or leave it", as they stand). She then gave the participants 5 minutes to come up with an improved version of the proposal that had received the fewest votes in favour from the list of 3 that had been voted on. She then asked the participants to vote on the version they had amended, and pointed out that amending a proposal changes the way people think about it.

The common problems and the (deliberately simplistic) proposals for public action to address them are set out in the table below.

Common problem	Proposals for public action to address these issues
The mistreatment of farm animals	Hire 5,000 rural inspectors to monitor farming conditions



<b>Common problem</b>	<b>Proposals for public action to address these issues</b>
Road accidents	Limit speed to 70 km/h outside built-up areas, 30 km/h in built-up areas
Childhood obesity	Banning the sale of sugary soft drinks to minors
Illiteracy	Replace 2 hours of sport with 2 hours of national language teaching per week during secondary school
The demographic deficit	Extend secondary school hours beyond 4pm so that mothers can work
Pollution from nuclear waste	Shut down all nuclear power stations immediately
Lower purchasing power for the poorest people	Introduce a minimum wage for all sectors / Raise the minimum wage by 5% above inflation (depending on the country)
The disappearance of bees	Banning pesticides in agriculture and horticulture
Famines in the Sahel and Sudan	Devote at least 1% of GNP to development aid
Lack of technicians and engineers in industry	Organise an international lottery open to these professionals in countries outside the European Union entitling them to a residence permit
Weak margins and hiring in SMEs	Reduce social security contributions by 50% for the first 5 employees of a company
Hooligan violence around football matches	Setting up a police file specifically for football supporters

Contents of the presentation area

The constitutions of European countries and European Union treaties: distribution of the 3 powers (initiative, amendment, decision) between institutions. Direct intervention by the people (European Citizens' Initiative, referendums) and the questions posed by the latter (formulation of the question and the alternatives, interpretation of the answer given).

**5.2 The "demos", the relevant political community for democratic decision-making**

Educational objective of this stage. Key concept to be conveyed and illustrated

In a democracy, the political community that is legitimate to participate in defining public actions, the "demos", is neither given nor obvious *a priori*. It may evolve according to historical circumstances or the common problem to be addressed, and include, in addition to currently living adult humans, other human or non-human entities, past, present or future.

Role play and analysis

For each of the common problems to be dealt with in the table, the trainer asks the participants who is entitled to take part in the decision, and why, and asks why the populations that have not been mentioned are not included.



<b>Common problem to be tackled</b>	<b>Populations likely to be involved in decision-making</b>
Time in the evening after which residents of a building are asked to remain silent.	Hearing residents of the building concerned * Deaf residents of the building concerned * Residents of neighbouring buildings
The route of a road likely to cross a cemetery	Residents of the municipality in which the cemetery is located * Regional motorists' association * Regional transport planning authorities * Descendants of persons buried in the cemetery * Coreligionists / compatriots of persons buried in the cemetery
The composition of the feed given to dairy cows (maize, soya, forage)	Cattle farmers * Dairy co-operatives * Consumer associations * Local maize and soya farmers * Foreign maize and soya farmers * Local environmental protection associations * Associations to prevent deforestation
The content of sports activities in a primary school	Parents * Teachers * Pupils themselves (from what age? Why?) * School neighbours * Local authorities responsible for sports facilities and surfaces * Doctors, paediatricians and sports ergonomists * Child psychologists * Sports federations * Employers' federations
Technical standards for the manufacture of electronic toys	* Technical bodies on the toxicity of plastics * Technical bodies on electrical safety * Technical bodies on fire prevention * Technical bodies on radio interference * Local safety bodies for working conditions * Safety bodies for working conditions in toy-producing countries * Associations promoting recycling * Consumer associations * Professional federation of toy manufacturers * Professional federation of toy retailers * Local trade unions * Trade unions in toy-producing countries



Common problem to be tackled	Populations likely to be involved in decision-making
The rate of corporation tax	<ul style="list-style-type: none"> <li>* Federation of local</li> <li>* Ministry of Finance</li> <li>* Other "spending" ministries</li> <li>* Governments of neighbouring countries where companies are likely to set up</li> <li>* Shareholders' associations</li> <li>* Citizens of voting age, even if they do not pay tax (e.g. students)</li> <li>* Taxpayers, even if they are not voters (e.g. foreigners)</li> </ul>
Technical standards for car fuel consumption	<ul style="list-style-type: none"> <li>Fédération professionnelle des fabricants d'automobile</li> <li>* Fédération professionnelle des raffineurs de pétrole</li> <li>* Motorists' associations</li> <li>* Public transport users' associations</li> <li>* Cyclists' associations</li> <li>* Ministry of Finance</li> <li>* Local environmental associations</li> <li>* Global climate associations</li> <li>* Governments of countries vulnerable to climate</li> <li>* International solidarity associations with countries vulnerable to climate</li> <li>* Youth associations</li> </ul>

The trainer goes on to point out that it is not easy to define the relevant people, institutions and organisations to participate in the definition of public action, that there are possible conflicts and that they are also legitimate. He also points out that some of these institutions or bodies are in fact the advocates of human beings who are already dead or not yet alive, of non-human living species, or even of non-living but nonetheless real entities such as the climate or mineral resources or biodiversity, and who also have the legitimacy to be included in the political community relevant to taking the decision, in the "collective" in Bruno Latour's sense<sup>7</sup>, even if they would be "voiceless" in the absence of these human advocates.

Contents of the presentation area

The extension of the right to vote over time and the controversies that presided over each extension. Historical justification for the right to vote.

Examples of "collective" building around environmental issues: lagoon areas for seaside tourism and oyster farming, introduction of the wolf, "death of the forests".

Controversy over school rhythms in France between child psychologists, parents, teachers and tourism professionals.

**5.3 Human rights**

Educational objective of this stage. Key concept to be conveyed and illustrated

Democracy means that each member of the *demos* (as described in § 5.2 above), whatever his or her social or economic condition, effectively participates in defining public action, at the three stages of initiative, amendment and decision (§ 5.1), in complete freedom and security. The practical exercise of this participation in collective decision-making, without being

<sup>7</sup> Latour, B. "Politiques de la nature. Comment faire entrer les sciences en démocratie". La Découverte, Paris, 1999.





subject to pressure from powerful parties, or fearing threats likely to constrain the expression of one's choices, preferences and interests, requires that everyone's essential individual and collective rights be protected and respected. These essential rights are called **human rights**. Respect for them by a political body is considered a **necessary condition** for the practical exercise of democracy.

These human rights include<sup>89</sup> :

- o **individual** freedoms: right to life, prohibition of torture and slavery, prohibition of arbitrary detention and exile, right to liberty and security, right to property, right to respect for private and family life, right to marry, freedom of movement, departure and return to one's country, right to asylum, etc.
- o **legal** guarantees: right to legal personality, right to a fair trial and an effective remedy, presumption of innocence, no punishment without law and prohibition of retroactive laws, right to nationality, etc.
- o **political** freedoms: freedom of thought, conscience and religion, right to freedom of opinion and expression, right to freedom of assembly and association (including trade union freedom), right to take part in the conduct of public affairs and access to public office, periodic elections, universal and equal suffrage, secret ballot
- o **social** rights: social security, the right to work and to a decent wage, the right to reasonable working hours and paid holidays, the right to education
- o **equal** rights before the law and the prohibition of all discrimination.

### Role play and analysis

As an exception to the general organisation described in section 3 this stage does not include role-playing. Indeed, making visitors undergo the concrete experience of the denial of their fundamental rights would be contrary to the ethical and deontological objective of training in the fundamentals of democracy.

### Content of the presentation area

The exhibition uses historical and contemporary examples to illustrate what the **absence of** each of the facets of respect for human rights described above means in practice, and the **real-life experiences of** people who suffer or have suffered violations of these rights. It also shows how the denial of these rights limits or prevents the participation of the whole *demos* in political decision-making, and restricts that decision-making to a small group.

## **5.4 The "public spheres", the place for argumentative discussion**

### Educational objective of this stage. Key concept to be conveyed and illustrated

The democratic definition of public action requires that all the members of the political community, the "*demos*", have the existing and relevant **information** to proceed with the argued discussion leading to the definition of public action (even if this information is never absolutely sufficient to act with full certainty, cf. §4.6). The information in question concerns : (1) the very existence of potentially common problems; (2) the phenomena (physical, economic, social, legal, anthropological, ecological, biological, etc.) influencing the development of the common problem, whether their existence is established or still subject to

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<sup>8</sup> United Nations, "*Universal Declaration of Human Rights*", available at: <https://www.un.org/en/about-us/universal-declaration-of-human-rights>

<sup>9</sup> Council of Europe, "*Convention for the Protection of Human Rights and Fundamental Freedoms*", available at: <https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treatynum=005>



scientific or moral debate. To this end, specific tools for disseminating this information are needed to constitute the "public sphere" where the discussion takes place: this is generally the role of the **press**.

Until recently, the technical characteristics of the latter, where the model was that of **centralised broadcasting** from a single transmitter centre to a large number of receivers, created a **distortion** in the representation of the opinions and interests of the people and organisations potentially concerned.

Role play and analysis

The games successively represent two situations, when public policy is defined while: (1) the stakeholders do not have a common fund of information (case of the absence of a press); (2) only 2 participants have the discretionary right to disseminate to the whole group the information they choose among those they receive from some in particular (case of the presence of a centralised press).

The trainers give each participant a specific role and information about that role, on a card that the person keeps with them. The question asked was a choice between 2 options, A and B.

In game 1, the cards define for each person the gain or loss expected from each of the decisions A and B. For all but 2 participants, option A brings in 1 token and option B neither costs nor gains. For the 2 specific participants, option A costs 10 tokens and option B neither costs nor gains. The participants are then asked to vote to choose between options A and B, without being allowed to communicate with anyone, with the aim of ensuring that the result is the fairest for the group as a whole.

In game 2, the cards define the gain or loss for each option, expressed in tokens and with an explanatory text, and are distributed according to the following table, where N is the total number of participants in the group.

<b>Identity in the game</b>	<b>Number of participants with this identity</b>	<b>Effect of option A</b> (Gain / Loss of tokens, cause)	<b>Effect of option B</b> (Gain / Loss of tokens, cause)
Blue" press agency	1	+3 advertising contracts	-3 loss of readers
Green press	1	+3 advertising contracts	+2 more readers
Producers	(N/2) - 2	2 profitability and pay rises	-2 fall in activity and unemployment
Consumers	(N/2) - 2	+1 cheaper products	-1 more expensive products
Allergy sufferers	2	-5 serious illness	0 no effect

When each participant has her card, the trainer asks those who are the "press organs" to declare themselves. Each participant then has the right, if she wishes, to describe her situation to one of the press organisations, and to one only. The participants representing the media then publicly disseminate to all the participants the information they wish on the



consequences of options A and B, according to their interest. The other participants (not representing the media) then vote on the basis of the information available to them (both that received publicly and that relevant to them), always with the common good in mind.

After each vote had been counted, the trainer asked the participants to reveal publicly the private information they had, and then asked the group whether this new information received from others would have changed their vote, and why. She showed the extent to which the dissemination of information by the press is necessary for collective decision-making, and that a press that conforms to the centralised dissemination model runs the risk of distorting the information.

#### Contents of the presentation area

Places for discussing the common problems of a human group: Germanic "Ting", Greek agora, etc.

Examples from the history of the press and centrally distributed media: newspapers, magazines, radio, television. Illustration of the technical and professional press: local public spheres in a given professional community.

Dissemination of knowledge, including highly specialised knowledge, through books and public access to them (libraries).

The emergence of decentralised press distribution (blogs) and very wide access to specialised information (Internet, cooperative online encyclopaedias such as Wikipedia).

The emergence of the hybrid model of social networks, with decentralised production of content and centralised, opaque control of its distribution, with segmentation of the population into watertight sub-communities.

### ***5.5 Education: the cognitive and cultural conditions for argumentative discussion***

#### Educational objective of this stage. Key concept to be conveyed and illustrated

The definition of a public action requires that the people in charge of discussing it have the cultural and cognitive resources to **interpret** the available information, in order to draw technically sensible conclusions (i.e. so that the action taken has a chance of having the expected effects, given the state of knowledge at the time the decision was taken). Acquiring these resources and skills is a matter for **education**, both initial and lifelong.

#### Role play and analysis

Highly specialised and counter-intuitive technical knowledge that modifies the action to be taken in a specific circumstance. The trainer asks the participants what they would do in the circumstance in question, and why they chose that action. The trainer then carries out the experiment, showing that in reality the intuitively expected behaviour does not take place, and explaining that this result is not due to chance or unfavourable experimental conditions, but has been scientifically documented.

The counter-intuitive phenomenon is sought in the physical sciences, because they are easily reproducible. The examples considered at this stage are :

- a spinning top, which changes its axis of rotation perpendicular to the pressure exerted on it
- an inverted glass of water, closed by a thin sheet and placed on a table. The aim is to move the glass to another table, using one hand only, without spilling the water. Due



to capillary action and atmospheric pressure, it is better to keep the glass upside down than to try to move it upright.

#### Content of the presentation area

Historical statistics on the level of education over time (literacy, access to higher education).  
Dates of democratic revolutions.

Theorists of universally accessible education as a condition for the exercise of democracy: Condorcet.

The question of the skills and technical knowledge required for public decision-making: the risk of "expert power".

### **5.6 Time: the time needed for a reasoned discussion**

#### Educational objective of this stage. Key concept to be conveyed and illustrated

For a reasoned discussion to take place between the members of the political community, the "demos", they must come together in the same place to exchange information (cf. §5.4), but they must also have the necessary **time**. Human beings, whatever their intellectual capacity, need time to gather information, to exchange it and then to draw conclusions. Conversely, control over the timetable and speaking times is a very strong form of power over the discussion and decision-making process.

#### Role play and analysis

The participants are given cards corresponding to different aspects of a common problem (taken, for example, from the list in § 5.1) requiring public action. The trainer immediately asks them to vote on it, and then points out that they have - legitimately - demanded to take the time to read the information presented to them before taking a decision.

For the discussion, the participants are divided into 8 deaf booths with transparent walls. They can see each other but can only be heard by others if their microphone is activated. The fact that a booth's microphone is activated is made visible to all the participants by a light. The trainer controls the activation of the microphones and therefore who can be heard by the others.

In an initial 5-minute phase, the trainer invites each participant to pass on the information they have on their sheet. He then asks the participants to express their opinion on the public action to be taken. During this phase, successive participants speak for a random variable of between 10 and 40 seconds, determined automatically.

The trainer then asks the participants for their opinion on the way the discussion was conducted, on its fairness, and on the rules they feel are necessary to ensure this fairness.

In a second 5-minute phase, the participants express themselves according to the rules they have defined themselves. At the end of this phase, the trainer repeats his question about the fairness of the discussion and the effectiveness of the rules adopted.

#### Contents of the presentation area

One aspect of Tocqueville's "equality of conditions": time available outside forced labour, as necessary for democracy.

The rate of participation in political activities according to age and time available.

Rules for speaking at meetings, token or "talking stick" techniques.



## **5.7 A response to concrete, historically-dated problems: representation**

Educational objective of this stage. Key concept to be conveyed and illustrated

The concrete **obstacles** to ensuring that all citizens are permanently involved in defining public actions are as follows:

- the **workload involved** in studying the questions and discussing them in detail: if the same citizen had to take part in all these discussions, he or she would no longer have the time available for himself or herself, his or her family, friends, hobbies and, above all, for productive, paid work
- the low level of **education** of a significant proportion of the population, who therefore lack the cultural and cognitive resources needed to take part in a reasoned discussion on technical subjects
- the **distance** separating the place of residence of most citizens from that of the physical assembly where the argumentative discussion takes place
- the **number of** citizens who would be required to take part in the discussion at the same time: even by drastically restricting the speaking time allowed, adding them together results in disproportionately long discussions
- the need to **rapidly** define public actions in crisis or emergency situations
- the **language** of communication within multilingual political unions.

In the technical system and social structure that existed at the end of the 18th<sup>e</sup> century, the institutional solution that was adopted was that of **representation**: the general population elects a small number of permanent representatives (a few hundred), who meet in a single permanent location and devote themselves full-time to defining public policy, for a finite period of a few years.

The representation of a group by an individual creates a distortion that is very difficult to avoid, and a separation between the group of representatives and the rest of the population (the represented).

### Role play and analysis

The trainer asked the participants what, in practical terms, prevented all women from taking part in defining public actions and discussed the list given above.

The whole group is then tasked with defining public action on a given common problem, chosen for example from among those listed in § 5.1.

The group is divided into groups of three, established at random by the trainer, taking care to mix participants who do not know each other as much as possible. Each triplet debates the public action to be taken separately for 10 minutes, and delegates one participant to the central debate. The delegates then come back together and discuss among themselves for another 10 minutes to reach a decision. The other participants watch and listen, but do not have the right to speak during this phase, for example by being behind a two-way mirror through which the delegates cannot see the women represented, and where sounds are transmitted in one direction only by a microphone from the delegates' debate space to a loudspeaker in the women represented's space.

The trainer asked the representatives what they thought of the debates between the delegates, and whether they felt that the delegates had been faithful to the opinions expressed by their



initial trio. She also asked the group as a whole whether the public action decided by the delegates was in line with what the group as a whole would have liked.

### Contents of the presentation area

The contemporary organisation of representative democracy: representative assemblies at all levels of government, allowances for elective office, the appointment and control of the executive, political parties and elections.

The contemporary difficulties of representative democracy: disaffection with elections, the professionalisation of the political class and its separation from the rest of the population, the declining credibility of the political class. The feeling of dispossession by experts and large organisations.

Attempts at citizen participation and the difficulties involved.

## **6 Foresight section: e-democracy in the 21<sup>e</sup> century**

The tour ends with a prospective space for **research**, **training** and **direct experimentation** in electronic democracy in the 21<sup>e</sup> century.

Recent years have seen the emergence and rapid dissemination of **digital technologies** and institutions that can be used to define actions and public policies democratically, cooperatively, remotely and off-line: free software in open source code, online publication of dynamic written and audiovisual content, electronic messaging, wikis, document sharing, voting, authentication using asymmetric encryption and mass storage. The proportion of the population with **higher education has been** growing explosively since the 1960s in Europe (as part of a worldwide trend), and at the beginning of the 21<sup>e</sup> century reached an all-time high. This educated population is demanding to be involved in defining public action, because it has professional and technical skills that are at least equivalent to those of the players in representative democracy, and the latter can no longer justify their monopoly on proposals or amendments on the grounds of their presumed superior competence (although this was true from the creation of representative democracy in the 19<sup>th</sup> century until the 1950s in Europe).

This section presents the main features of a software package that democratically generates political action programmes, built on these technical and institutional foundations: the free (and therefore open-source) software package **KuneAgi**<sup>10</sup> ("*kune agi*" means "acting together" in the international communication language Esperanto), used by the [CosmoPolitical Cooperative SCE](#) to democratically define and select the [public policies](#) it recommends, and more generally the strategic decisions it takes. This section explains how this software meets the requirements for the democratic definition of public action as highlighted in the Fundamentals of Democracy course, and how it avoids most of the shortcomings of representation. The space gives learners the opportunity to **try out** and **learn how to** use the KuneAgi software.

The space also includes access to the<sup>11</sup> development repository for future versions of the KuneAgi software, on the open-source Gitlab platform.

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<sup>10</sup><https://www.kuneagi.org>

<sup>11</sup><https://gitlab.com/cosmopoliticalcoop/KuneAgi>



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