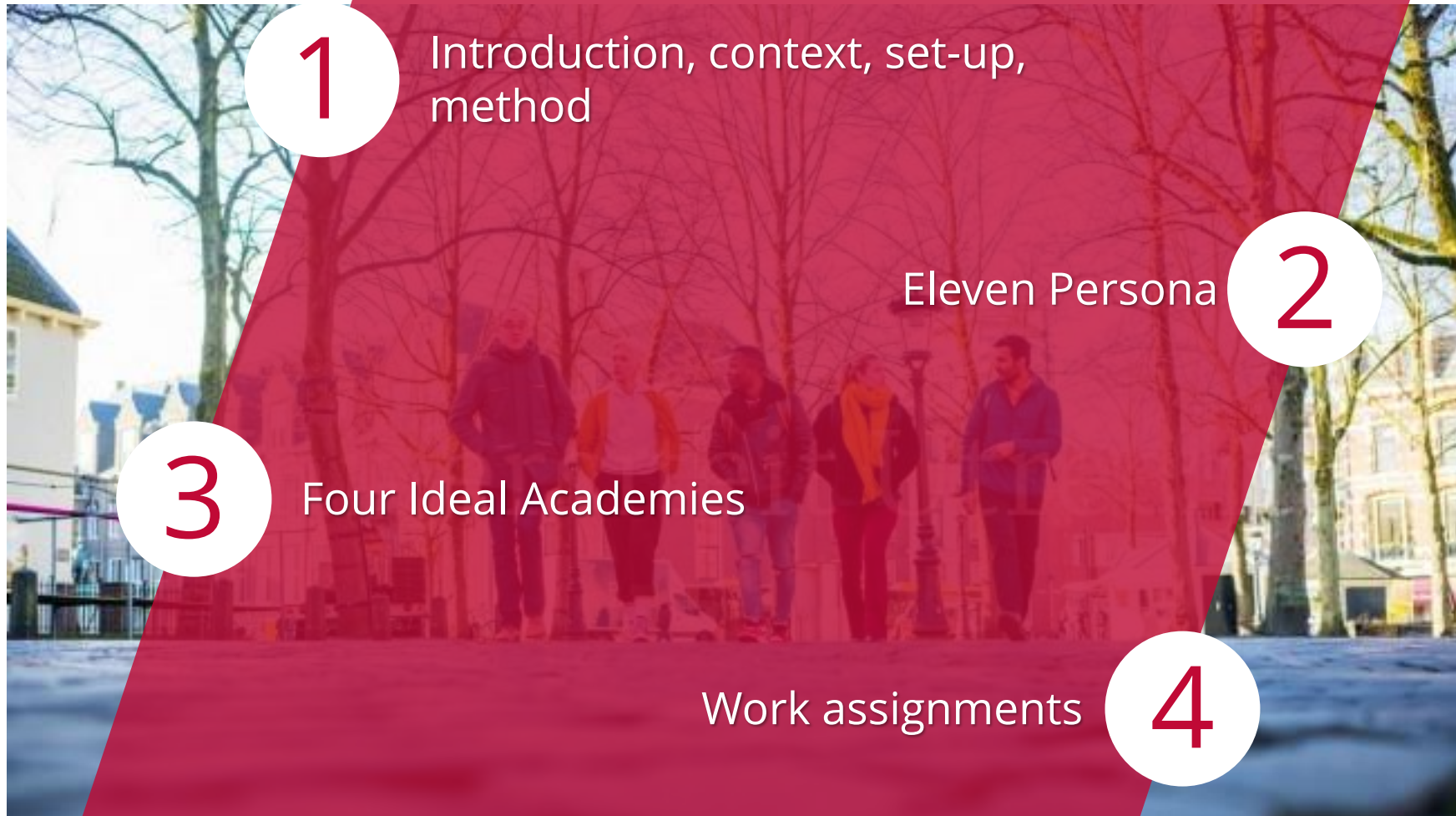


# Faces of open science

Life Sciences for  
Society

Open Science  
Programme



1

Introduction, context, set-up,  
method

2

Eleven Persona

3

Four Ideal Academies

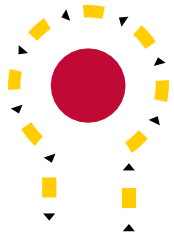
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Work assignments

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Contact





development center



open community



sustainable university



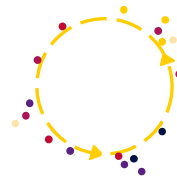
Innovation center



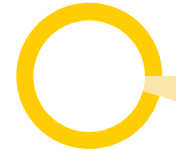
scholar



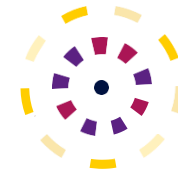
visionary



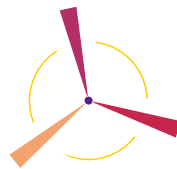
booster



conformist



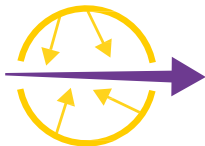
Expert coach



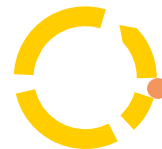
architect



connector



critic



opportunist

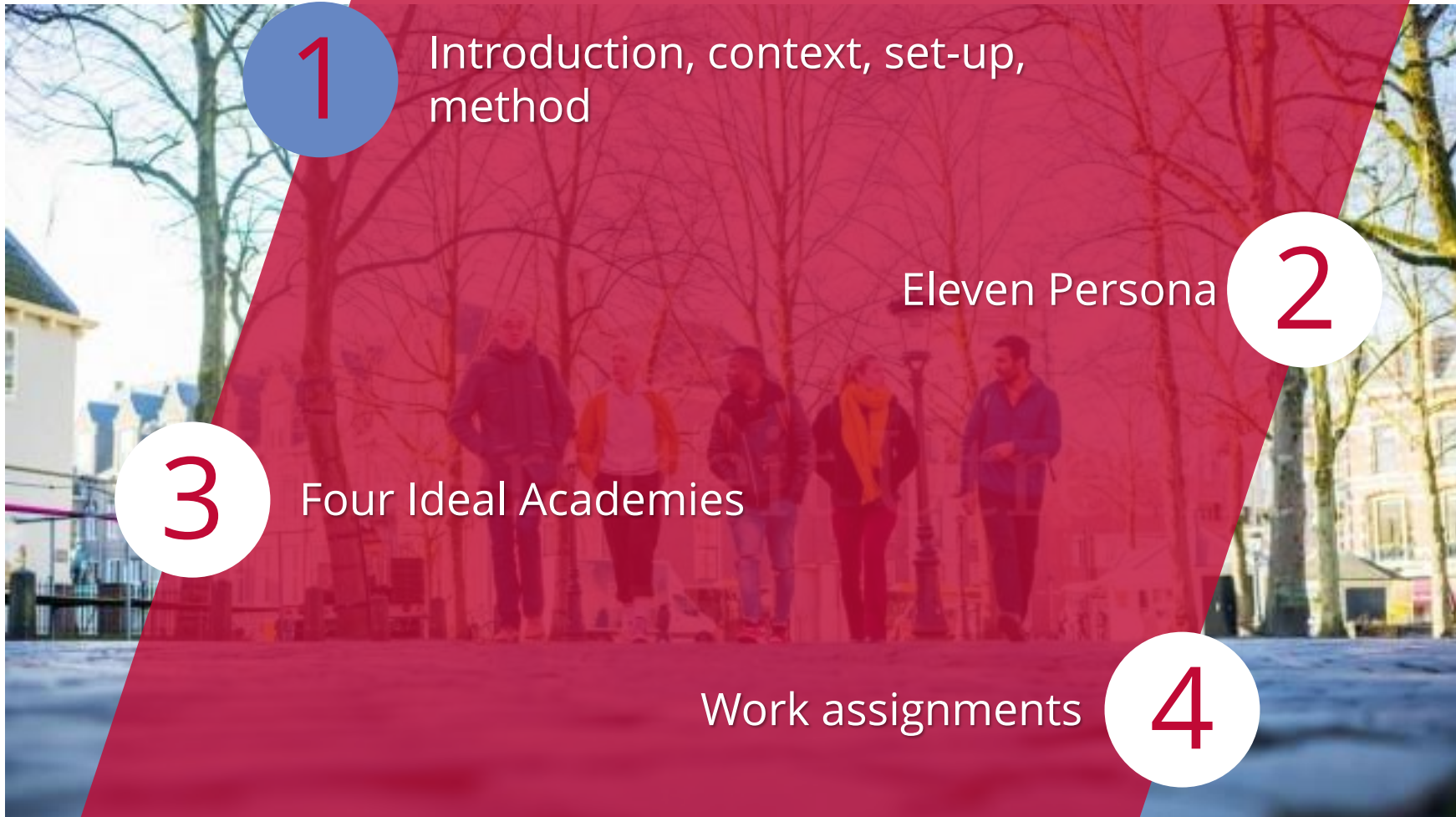


guard



facilitator

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## INTRODUCTION: MY OPEN SCIENCE IDENTITY

The transition to Open Science is given shape by a growing number of people who come from different backgrounds, have various reasons to be 'open' and act according to different (scientific) values. The goal of this assignment is to make participants aware of the fact that within the diversity of the Open Science movement various ideas of what academia could be exist, different ideas exist what role a university can and should play in society and which attitude this requires from individual scientists. Participants are invited to think about their own identity in the Open Science movement.

Faces of Open Science offers a toolkit to think about such an identity. In this document you can find the following tools for that:

1. An introduction to the material, including context, set-up, method and background literature
2. Descriptions of eleven persona and four ideal academies to which they are oriented. Important to keep in mind when reading - none of these persona can be traced back to one individual real person. They are exaggerations and abstractions of different positions you may encounter in the Open Science movement at Utrecht University
3. The visual concept and the resulting images. We conceived the concept of persona as circles, all of which are more or less and in different ways 'open'. When these circles are put together, they can still form a 'closed' science, which looks like a maze or a lock. By 'turning' the circles you can get the people in science 'on the same page' in different ways, opening science, in order to work towards a better future
4. Finally, the work-assignment for the afternoon

## CONTEXT

The transition to Open Science started in the past decade and came from two directions. On the one hand it started bottom-up, where scientists found their way to open research skills from their methodological frustrations and united in Open Science Communities. But certainly also top-down, where university administrators, policy makers, and even politicians decided to strategically put "Open Science" on the agenda and implement it.

These are great developments, although they also cause a lot of confusion. For example, how is it that commercial publishers operationalize Open Science as a business case, while other activists want to get rid of them? And how is it possible that some scientists advocate open access and open data, but are concerned that 'anyone and everyone' will then simply have access to this information? In short, it appears that 'Open Science' lends itself wonderfully well as a buzz word to communicate virtue, while interpretations of its meaning vary widely.

Oddly enough, it seems that it is precisely the administrative success of the Open Science movement that causes some scientists themselves to express more resistance. By focusing on 'skills' and 'hands-on' open science 'practices', this tar baby is quickly avoided. This is risky though. The focus on concrete "tools" makes it increasingly unclear what "Open Science", or more specifically: being an "open scientist" can mean. For example, a "methodologist" will be primarily concerned with pre-registration and open data, a "librarian" with open access, a "marketer" with public engagement, and a "holist" with more reflection. Without understanding the overlapping and clashing interests, the open science movement potentially loses the ability to reflect critically on itself. Which might even make it fall prey to the very mechanisms it is trying to reform.

## SET-UP

We want to create (a) space in which to reflect from different perspectives on the ideological, ethical, and methodological battleground within the Open Science movement. It should become clear which perspectives exist, by whom they are propagated and from which positions, but also how these perspectives relate to each other. Such an overview could be a starting point for internal dissent and constructive reflection. In this way, it remains possible to maintain a critical dialogue within the same reform movement.

In order to realize this, the various positions within the "Open Science" movement must be made transparent; where these positions overlap, and where they contradict each other on an ideological, institutional, methodological, and behavioral level. It is useful to exaggerate these different positions, so that it becomes easy for those who are active or interested in Open Science to recognize themselves in the different positions, or to put themselves in their place. These 'ideal types', 'stereotypes' of different academic identities that, for various reasons, feel at home within the Open Science movement could, in line with recent science history literature, be called the 'scientific self'. More precisely, it concerns 'the role-specific identity of scientists that is expressed in specific combinations of skills, competencies, qualities and motivations'.

In this project, we used interviews, policy documents, manifestos, (in)formal publications, and expressions on social media to arrive at various scientific selves within the Open Science movement of the past ten years. In doing so, we can build on existing taxonomies of the notion of 'Open Science', and characterizations of different schools of thought within the movement. For analysis, we pragmatically used the recent science-historical, and sociological literature to relate to recent debates that explore the interaction between virtue ethics, epistemology, and integrity. For the more empirical part of the project, we will focus particularly on Utrecht.



## METHOD

We interviewed a representative group of people (n=20) who profile themselves as promoters and sympathizers of "Open Science" within the UU. This includes administrators, policy makers, researchers, and support staff. The interviews are semi-structured; three topics were discussed. In the first part, we wanted to find out what kind of research someone does and why, and related to that how the participant has arranged their career. In the second part, we tried to find out the participant's image of science from these personal motives. In the third part, we set out to discover why the participant is involved in "open science," what they think of the current movement, and how the participant feels they relate to the rest of the Open Science movement.

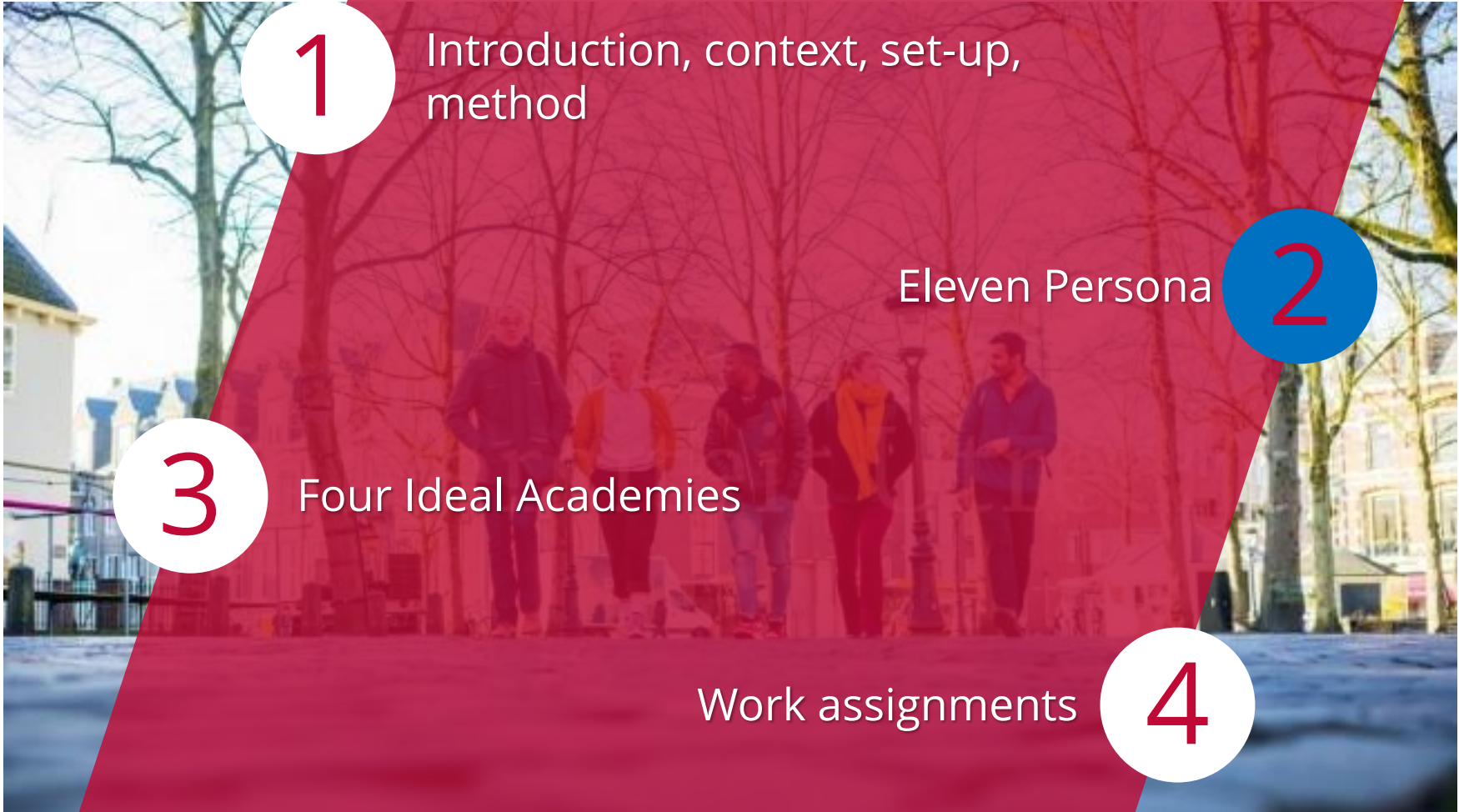
These conversations took place for up to 45 minutes during a walk in Utrecht. This conversation was recorded and transcribed. At the end of each interview, the researchers recorded their own reflection in a 15-minute conversation. In it, they reflected on how the interview changed their perspective at that time. These final recordings will be open access; this does not include the interviews and transcriptions. We systematically analyzed the transcripts once all interviews had been completed. For each interview section, we first coded openly, and then axially and selectively, based on the stereotypes targeted at that time. The collections of quotations served to arrive at final characterizations. We described these both schematically and narratively.

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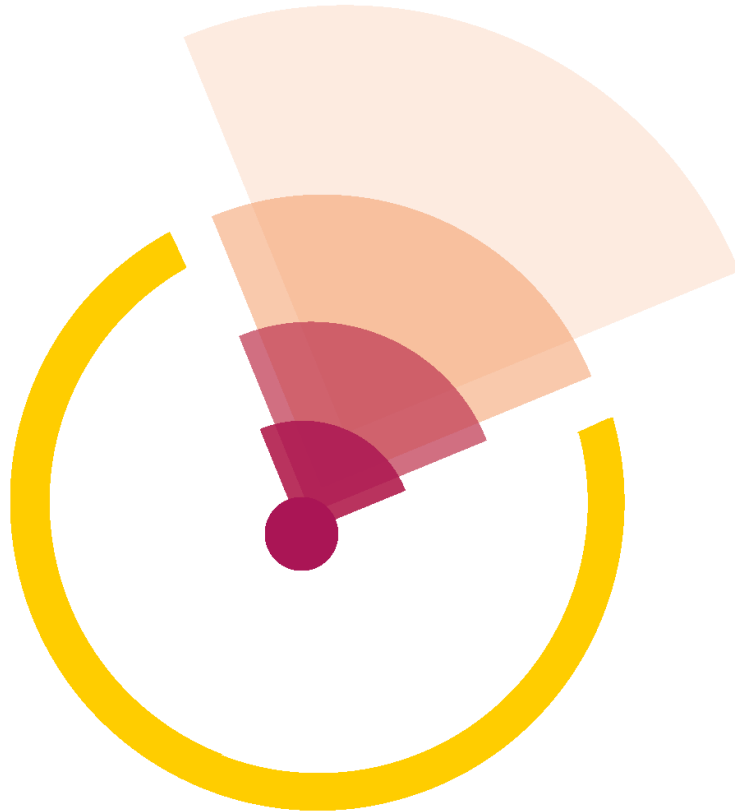
Work assignments

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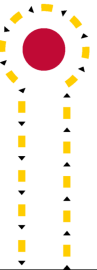
Contact



## VISIONARY



- Deep love of knowledge, learning, research and development
- Averse to hierarchy
- Uses (metaphors from) the arts
- Eye for ritual and ceremonial side of the University
- No unequivocal answers, but room for new dilemmas and issues
- Many anti-types: relates at odds with opportunist, researchers with practical approach, conformists, visionless facilitators and conformists
- Blame: Messiah

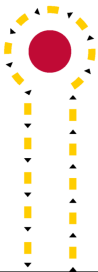


## VISIONARY

The visionary has a deep love of knowledge, learning, research and development. This persona sees themselves as an idealist and acts on a clear image of the ideal university. The visionary wants to reduce inequality in science and likes to play with the dynamics between his place in the hierarchy and content. This persona places little value on titles and positions. If the visionary holds a high position within the university, they use it primarily in a functional way.

The visionary likes to seek out resistance, and once found, this persona takes on a vulnerable and modest attitude. The visionary then makes frequent use of (metaphors from) the arts, and flourishes as an expressive and creative storyteller. Change, according to the visionary, is based on the profound realization that "it can be done differently" and this persona believes of self that everything should be able to be challenged-especially the establishment.

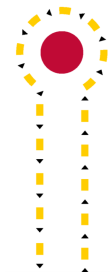
The Visionary envisions a change to an academic work environment where this persona would want to work themselves. Good science, according to the Visionary, has an eye for the ritual and ceremonial side of the university. The ideal university is meaningful, pays attention to the right (valuable) questions, and is humble and transparent. Good science does not necessarily provide unequivocal answers, but offers space for new dilemmas or issues to arise. That science, according to the visionary, is focused on development, not output, and thrives on trust.



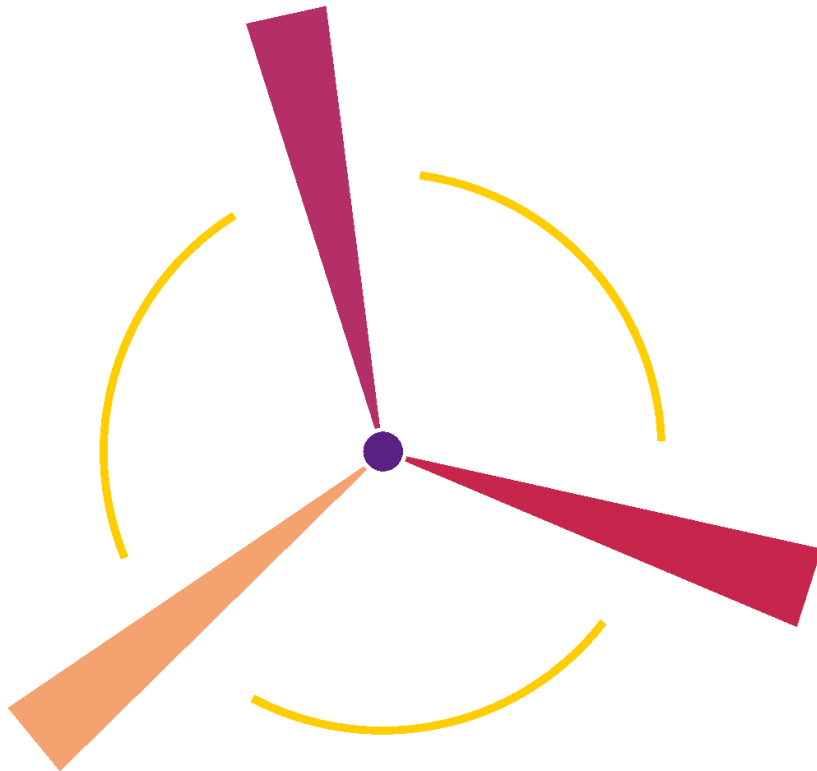
## VISIONARY

A danger for the visionary is that they can be reproached for behaving like a "Messiah". This persona experiences this itself as a result of the tension between the urge to be a "do-gooder," and the belief that the ability to change the world is an "illusion." The visionary shares with the critic a willingness to take on a dissenting role. There is a certain tragedy in the visionary, for this persona has many anti-types. The visionary has difficulty with the opportunist, and researchers with a very practical approach to science practice. This persona also has a pronounced aversion to conformists, visionless facilitators, who slow processes down. As a result, the visionary occasionally seems a bit lonely, but the love of research, and the people who do that research, always wins.

Open science, according to the visionary, must above all free itself from dysfunctional hierarchies by focusing on the plurality and pluralism of knowledge development. At the moment, according to the visionary, Recognition and Rewards gets the most attention, Open Access and FAIR Data are necessary conditions for real interaction with society. Indeed, the visionary attaches great value to the latter.



## ARCHITECT



- Oversees the playing field not the details
- Attention to leadership
- Has little to do with authority/hierarchy, but is often in position of authority/administration
- Science is a 'work place'
- Action-oriented
- Improvement of society
- Thinks systemically, from power relations
- Relates at odds with visionary, scholar and critic who are less inclined to move to concrete action





## ARCHITECT

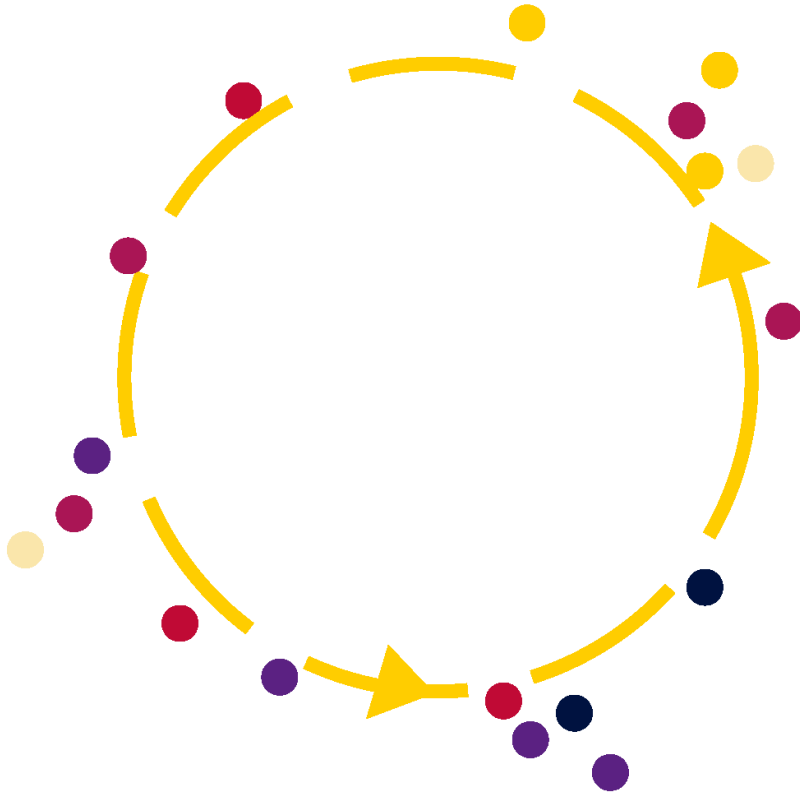
The architect is busy institutionalizing their ideal science in concrete form. In doing so, this persona oversees the playing field and does not get lost in the details. The architect pays close attention to leadership and focuses on the system in order to create a better "workplace" for good research and education, and to enable scientists to "follow their instincts." In addition, the architect is action-oriented and often has the explicit ambition to improve society. A well-functioning scientific system plays a central role in this ideal society.

The architect translates from substantive beliefs to the strategic and managerial level. This persona is ambitious and idiosyncratic, but does not see themselves as a perfectionist. It is ironic that the architect says they place little value on authority, but usually has a position of authority. This is not coincidental. This persona wants "not just to watch the store, but to improve it." In doing so, the architect thinks on a systemic level of power relations, and debates not only within the academy, but also with fund providers and politicians. Moreover, the architect is averse to "esoteric jabber" and this causes a tension with the visionary, the scholar, and the critic, who are less apt to move on to concrete action although they envision the same ideal academy.

Good science, according to the architect, is "also just work" because "scientists are also just employees." Similarly, Open Science is also a "way of working." The architect does not like people who see Open Science as a private problem of academics, and try to bring about systemic change on a micro level. The focus and work area of the architect is now mainly on Recognition and Rewards, but mainly because this is a necessary condition for Public Engagement and R&R is their line of influence. The latter (PE) should receive more attention because the ideal university of the architect is in firm interaction with society.



## BOOSTER



- Quartermaster
- 'being different' - knows when deviation has no place
- Extrovert, assertive, enthusiastic
- Not afraid of public appearances
- Talks a lot - listens less (in contrast to connector)
- Everything can be different - a lot of optimism
- Danger: accused of not listening well and only sending
- People who think in terms of problems
- No problem with opportunists



## BOOSTER

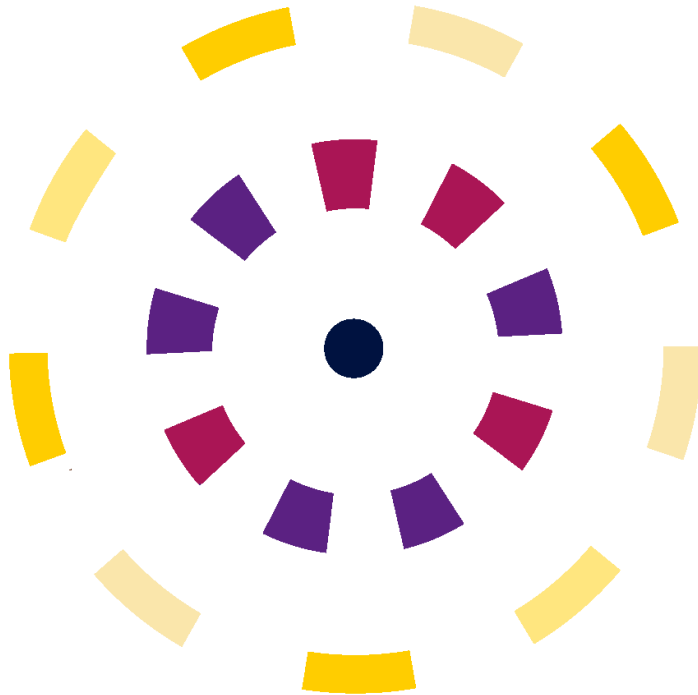
The booster is a true quartermaster and loves the stage. This persona is particularly concerned about the culture of science in which it is not allowed to make mistakes. Indeed, the booster wants "the bulk of scientists" to have a place where they feel invited, challenged, and at home. The booster generally has experience inside and outside of the academic system and has evolved: from being outside of science to being a culture changer in science, from a focus on research to a focus on culture improvement, or this persona has no academic background from home or has worked for a time as a non-researcher. Thus, the booster has experience with "otherness," and a highly developed sensitivity to manners in which deviance has no place.

The booster is extroverted, assertive and enthusiastic. This persona is not afraid of public performance and large mass groups. This persona talks a lot in contrast to the connector, who listens a lot. The booster loves examples, can get people moving, and, like the visionary, is a storyteller. The booster is explicitly activist, can commit people, and tries with a surplus of energy to "put Open Science on the map," and "generate action among a large group of scientists." The booster is an advocate "who does not want to just whine about what is not going well" and does not want to be "pathetic." Indeed, the booster believes "that anything is possible" and "everything can be rebuilt." Things can be totally different and that gives reason for a lot of optimism. The booster likes people in classical support roles who are more radical than many scientists, and sees that the scientific system is shaped primarily by the people around administrators (not the administrators themselves). This can create a tension with the architect.

A danger for the booster is to be accused of not listening well and mainly sending their own message. This persona must occasionally slow down, but stagnates if they cannot follow through. The booster has difficulty with the "hardliners" within the Open Science movement-the people who, with the best of intentions, have the opposite effect because they criticize others in public, for example. The booster also has difficulty in dealing with people who think in terms of problems and in dealing with (older) professors who only do fundamental research. This is one of the few types that does not necessarily hates the opportunist. Within the Open Science movement, the booster is active on every topic.



## EXPERT COACH



- Scientific infrastructure
- This persona 'wants to win'
- Science needs to compete with for-profit - driven sector
- Aware of market players (publishers, technology companies)
- Efficient and effective
- Contact with individual scientists - personal stories - influential role at individual level
- Hindered by university bureaucracy more than institutional hierarchies
- Runs up against traditional view of 'support'



## EXPERT COACH

The expert coach is passionate about the scientific infrastructure that makes education and research possible. This persona especially sees the benefits of having a head start in the open sharing of data and inventions. According to the expert coach, science now has too little clout and it would be more effective to fully switch to intensive collaboration, in which not only researchers, but also engineers, data experts and other professionals are given a more active role. According to the expert coach, this is the only way science can compete with the for-profit sector.

According to the expert coach, good science is very aware of the various commercial parties with which science cooperates, such as publishers and technology companies. The expert coach is aware of the commercial interests involved and believes that these parties have a right to exist within science. The responsibility for the proper functioning of the public identity of science therefore lies primarily with science itself. For the expert coach, good science is efficient and effective; innovation is one of the core aims of science.

The expert coach asks of themselves and others to "take up the fight." This persona likes to work hard, on their own initiative, and outside of office hours. Work and personal life intermingle quickly, and this is generally not a problem for this persona. The expert coach is proactive, comes along, sets up many initiatives and is pragmatic, seeking out scholars for support, but always taking the "own agenda" into account. Indeed, this persona never solves the presented problem alone, but allows one's own beliefs about Open Science to be an emphatic part of the help given. Thus, the expert coach plays a very influential role at the individual level. Partly because of the contact with many individuals, the expert coach has a very good eye for the personal story and creates space for it. The persona sees psychology as part of its own expertise.



## EXPERT COACH

The expert coach often has had an academic education and then started to work in a specialism. That specialty mainly relates to the infrastructure that makes science possible. Within their work, this persona is hindered by a traditional view of "support" in the traditional university. As a result, this persona does not suffer so much from institutional hierarchies as is the case, for example, with the visionary, the architect, and the Guard. However, The Expert Coach does have major problems with university bureaucracy, such as worn-out job titles and traditional ways of working.



## GUARD



- Conscience of science
- Has seen and often experienced malpractice 'first hand'
- Expects architect to use their power to reform the system
- Wants to fix
- Has experienced 'conversion'. From participating, to embittered, to action mode
- Wants to set an example
- Can be rigid - is always careful
- Dislikes opportunists
- Perfectionist, in contrast to architect, who is mainly ambitious
- Improvement through methodological improvements and clear integrity guidelines



## GUARD

The Guard functions as the conscience of science and has great concern for integrity of research, researchers and methods. This persona wants to contribute to a sustainable working environment for academics and sees themselves as a true repairer of the scientific system that does not (or no longer) enable knowledge to be produced in a robust and responsible manner. The Guard has been bitter, overcame that, and now wants action. The Guard cannot regard knowledge as true and feels that no honest opinion can be formed if research is methodologically and ethically incorrect.

The Guard has generally had very bad experiences in their own career, usually during their Phd, in which powerlessness and injustice have played a role. This persona has seen and sometimes experienced malpractice "first hand." The Guard has been a victim of the hierarchical structure in the university, this in contrast to the expert coach, who is mainly bothered by bureaucratic structures in the university. Usually the Guard has experienced some kind of "conversion." Now the Guard believes of themselves that they should be a role model and explicitly expects influential scientists and administrators to use their power to bring about systemic reforms.





## GUARD

The Guard can be rigid in the conditions that science should meet and does not easily make concessions to them. At the same time, the Guard struggles with its own rigidity. This type speaks out vehemently against injustice and, of all the types, is most affected by injustice. The Guard may have a perfectionist attitude, in contrast to the architect, who is especially ambitious, but is above all very careful. This persona constantly emphasizes exchanging skills and making use of each other's expertise. The Guard likes to set up a study methodologically well. This is sometimes at odds with the wonder and (sometimes esoteric) creativity of the research that the visionary aspires. This persona is a true rebel and opposes the opportunist, and also takes issue with people who throw a "straw man for open science interventions." "Yes, this is just part of it" or "This is how we do it here" are statements to which the Guard is immediately allergic.

The Guard has experienced a kind of conversion to Open Science, usually started with calls for transparent practices and making scientific publications more accessible, but increasingly became a great advocate of Recognition and Rewards. Public Engagement, while important, is certainly not the core of its own attention and commitment. Open Science, according to this persona, is very much related to "simply, improving science." This does not have to be only in the area of openness, but can already be done through methodological improvements and clear integrity guidelines.



## CONNECTOR



- 'What do we get out of each other'
- Builds through people
- Willing to adapt to the other
- Like expert coach, pays attention to personal stories
- In contrast to the booster, active and engaging on an individual level
- Likes to listen - makes people feel heard
- Dislikes reformers with unrealistic expectations
- Loyal - keeps pulling 'dead horses'
- Wants change, but can be very empathetic with doubters and 'laggards'
- Risk: 'too soft'



## CONNECTOR

The connector is constantly concerned with the question, "What do we need from each other?" in order to bring about a culture change in science. This persona builds a (new) foundation of science through the many people who move around in science. The connector explicitly strives for a culture where mistakes are allowed to be made. The connector is optimistic and always willing to adapt their own terminology to their interlocutor. Like the expert coach, this persona pays attention to the personal story and, unlike the booster, is also active and engaging on an individual level. The connector likes to listen and make people feel heard. This persona looks for cross-links and does not like it when reformers with the same goal have unrealistic expectations of people. The connector is loyal and keeps "pulling dead horses" for a long time, because they keep seeing opportunities for a long time-sometimes wrongly. Open Science for the connector is about how to involve the end user of knowledge. For this persona, issues surrounding the Recognition and Rewards of researchers are mainly about offering people space in their heads to be able to make such a change.

The connector sees themselves as a pivot in the transition from an old to a new system. The persona does want change, but can deal very empathically with doubters about that change. The connector "keeps coming back to pick up stragglers," and always seeks help or cooperation. This persona does not want to create fear and prefers to focus on behavior. The connector, unlike the booster, quickly finds it narcissistic when it comes to them personally, which has the risk of others calling them "too soft." The connector has difficulty with people who say they are in the middle of a transition, but roll on in the old way. The connector also has difficulty with the "hardliners" who, through much public criticism, backfire among the many people who are not yet fully in transition.



## FACILITATOR



- Collects good ideas, combines them, makes them practical within existing institutional context
- Wants to "empower" people
- Sees through power relations, uses them as functionally as possible
- Team
- Result-oriented, measurable goals
- Clearly defined functions, roles and responsibilities
- Follows architect and visionary in their vision of ideal science
- Like architect, often asked for managerial roles
- Possible blame: lack of vision
- Dislikes 'people who say they do not need to manage' and 'who are mainly in their own heads'



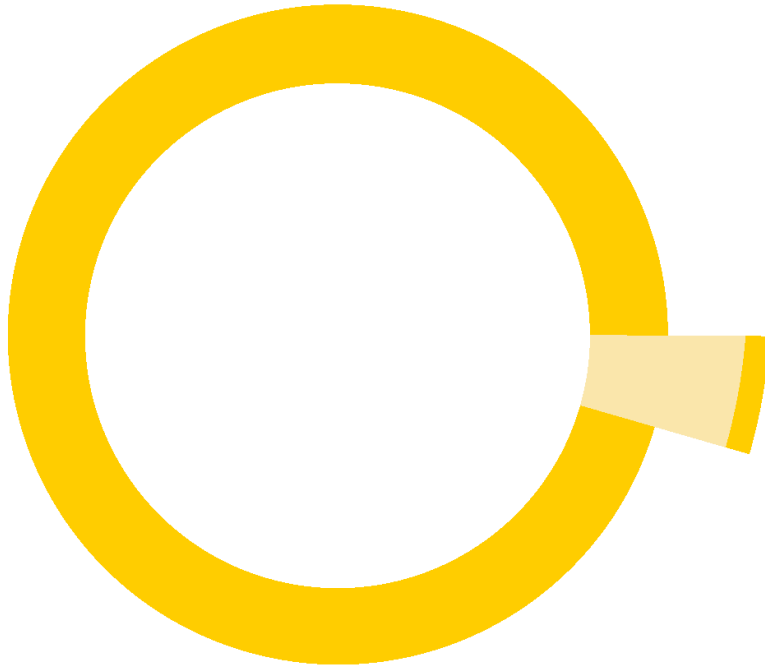
## FACILITATOR

The facilitator gathers good ideas, combines them, and makes them practical within the existing institutional context. This persona "wants to enable people to do Open Science", sees through the power relations involved, and uses them in the most functional way possible. The facilitator asks how people can be supported in a desired behavioral change, and good science, according to the facilitator, is focused on the team and not the individual. The facilitator is vigilant against "sloppy science" and follows the visionary and the architect (within themselves or others) into a vision of ideal science.

The facilitator is results-oriented, using measurable, clearly defined goals where it is easy to see whether or not they are being achieved. This persona has an eye for a well-functioning organization with clearly defined functions, roles, and responsibilities. The facilitator thinks carefully about how ideas can be practically implemented, ensures well-organized "governance," and in the process combats the distinction between support and academic staff. Like the architect, the facilitator is often asked for managerial roles, but feels more comfortable in a managerial role. This persona does not necessarily have a managerial ambition, but must, out of necessity, organize things on its own accord. For The Facilitator, the accusation of lack of vision is lurking. Opposed to this persona are "people who say they don't need to manage", who are busy with their own research and are mainly "in their own heads".



## CONFORMIST



- Culture change within current status quo
- Research
- Robust expertise
- Principled
- Publications and impact factors biggest problem in science
- Responsible position
- PhD's 'hands and feet of science'
- Has (struggled) through classic career path (comes from 'old system')
- Often grew up in scientific family
- Anti-types: Expert coach (role of market forces), bureaucrats/policy makers who talk in policy language
- Shares with guard desire to repair, but sees this happening on other topics



## CONFORMIST

The conformist is positive in itself about a culture change that improves science, but prefers this to take place within the current status quo and within existing disciplinary structures. The conformist emphasizes good conditions for research and wants to maintain and sustain them as much as possible. The conformist can be strict and principled with others and with themselves, is curious and loves to build robust expertise.

The usefulness of science, according to this persona, is very difficult to express in the short term. The academic enterprise is "a slow growing tree." According to the conformist, the main problem in science is that researchers are judged by the number of publications but that many of those publications are not relevant for their researchers and bad indicators for research quality, and the impact factors associated with them. This is because parts of the science business has fallen into the hands of people who do not have the (scientific) expertise, needed for such a responsible task.

In their day-to-day work, the conformist often has a responsibility to make sure that the current situation (in a lab, in a research group, and financially) is functioning and has a lot of work to do. "If I signed up for something, I will do it until you chase me away with a baseball bat." The conformist feels responsible for people around them and for those they lead. PhDs are important as the "hands and feet" of research groups and are in the service of science. Because they are so important, they must also be able to work in good conditions. The conformist often comes from a scientific family and has struggled (with difficulty) through a "classical" career path--including all the sacrifices that come with it. The conformist has grown up in the "old system."



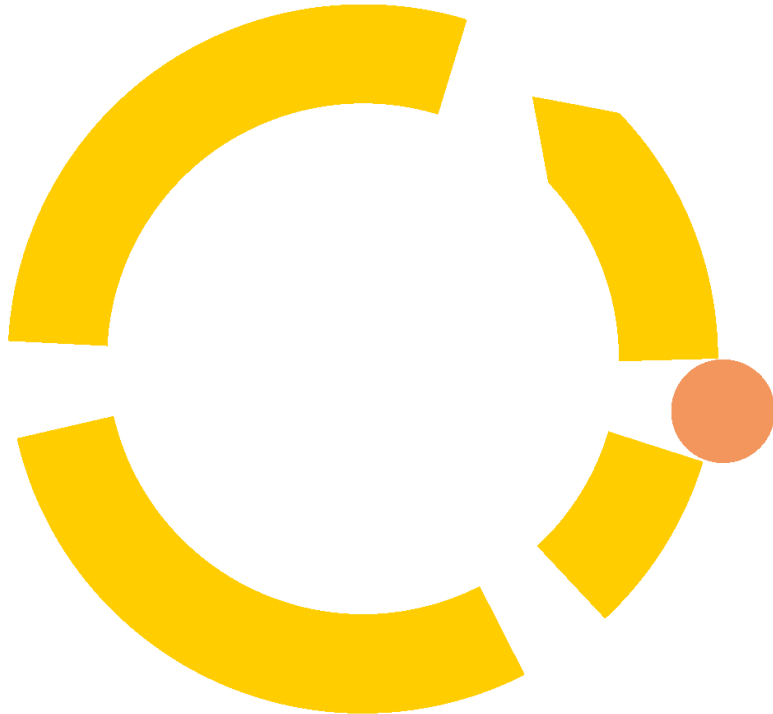
## CONFORMIST

The conformist is at odds with the expert coach when it comes to assessing the role of market players in science. Bad science, according to the conformist, does not contribute to "the field as a whole." This persona shares with the guard the desire to "fix" science, but sees this happening in other topics. The conformist is troubled by bureaucrats and policy staff who talk in their own inscrutable policy language. For the conformist, the most important question in the context of Open Science is how expertise can again become the starting point in the scientific publishing infrastructure. This persona finds themes around Public engagement and Recognition and Rewards not concrete enough. Moreover, according to the conformist, these topics are not part of research and science.





## OPPORTUNIST



- Driven and ambitious
- Open Science is a new opportunity
- Is good at career play
- Can run in the old and new system
- Can translate personal interests and concerns well into wishes of funders
- Has a permanent contract
- Quickly becomes the posterchild of initiatives in which others have put more time
- Hitchhiker

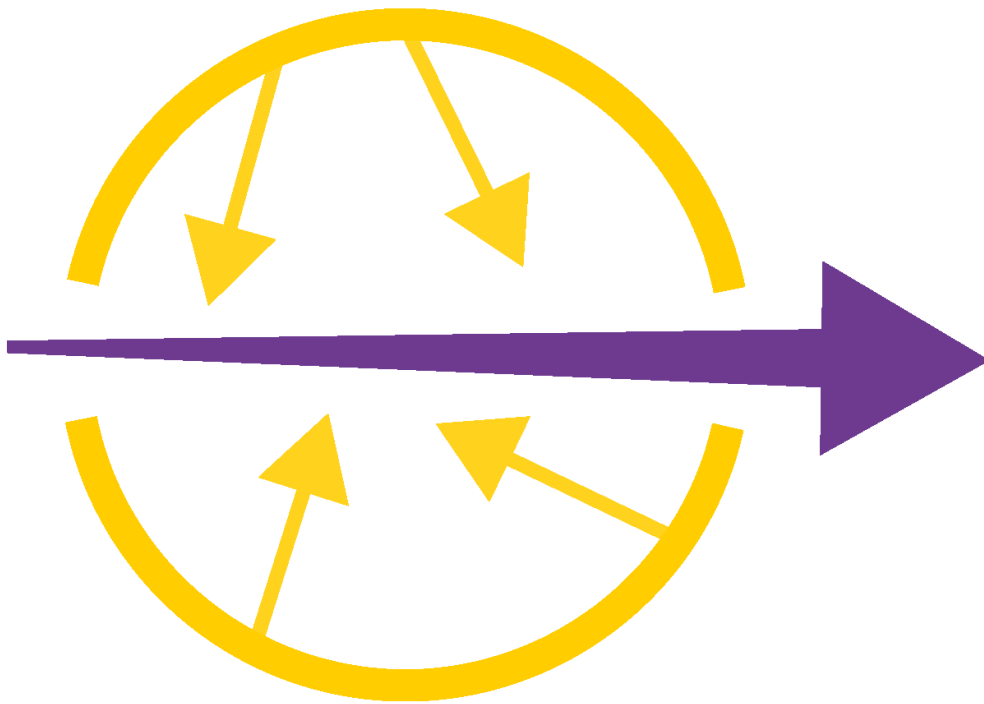


## OPPORTUNIST

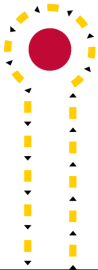
The opportunist is characterized by an enormous drive and ambition, and sees Open Science primarily as a new opportunity. This persona is tremendously driven, and pays close attention to what is expected of them by those who determine who will or will not make a career in science. This sensitivity ensures that they are good at the science career game. Whether this is in the old or the new system does not matter much. This persona is therefore very adept at translating personal interests and concerns into the wishes of a specific funding system, and therefore does not behave much differently in practice than before. In that context, the opportunist is good at justifying why Open Science is not reflected in their own publications, but does play a role in their intentions. The opportunist is in a fixed secure position in the academy and quickly becomes a "poster-child" for initiatives in which in other people have actually put more time and effort. The opportunist is frequently cited by other types as the ultimate free rider.



## CRITIC



- Averse to injustice
- Eccentric - provocative use of language – big mouth – likes to challenge
- Like the architect - avoids job titles and hierarchy
- Less inclined to take action (contrast with architect)
- Seeks resistance and discussion
- Criticizes internal ranks
- Finds experience and expertise in a discipline very important - is well-read
- Is a rebel, just like protector, but mainly in words
- Risk: offending like-minded people by sharp texts and words
- Wants to institutionalize "constant criticism"

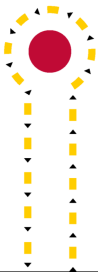


## CRITIC

The critic is averse to injustice, wants to fix, and is not afraid to stick their neck out. This type likes to be an eccentric. Like the visionary and the architect, the critic avoids naming job titles and besides that uses provocative language. The critic likes to excite and challenge people, and seeks out resistance and discussion to move forward. This persona likes to take a different position and also expects others to (be able to) think defiant. Like the visionary, this type wants to "dare to challenge everything". The critic also criticizes "internal ranks," questions authority, and addresses people about lack thereof. The critic considers experience and expertise in a specific discipline very important.

This persona has a tendency toward perfectionism and is strict with themselves and others. The critic likes to think, but not to "think in fixed patterns" and shares that with the scholar. The critic says of themselves that they have a big mouth, but does not consider themselves bold enough in action. The critic, like the guard, is a rebel but expresses that rebellion primarily in words. This persona is principled, inspired and idealistic.

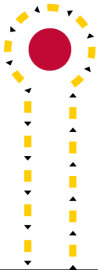
The critic runs the risk of inadvertently "bump heads" with like-minded people and can provoke irritation in others who are "hard at work" by sharp texts and words. In the context of a culture change, the critic has a strong institutional consciousness, this type likes to address and likes less to implement, and wants to "change the system from within" while maintaining constant criticism. The critic was once rigid, but has learned that being too rigid is not sustainable and knows very well what losing is. The critic is the greatest opponent of conformism and opportunism. And especially dislikes "sensible managers" who do not commit to an ideal.



## SCHOLAR



- Complexity
- Interaction between concrete events and abstract concepts
- Practicing science gives meaning to existence
- Educator
- Classic career path, respectable scientist
- Danger: misunderstood as esoteric, but sees thinking as 'practical' matter
- Antitype: administrator who meets about money and people who think in fixed patterns
- Aware of historical and local context of knowledge
- Critical of the umbrella term Open Science
- Contribute to society through good education, not just through research

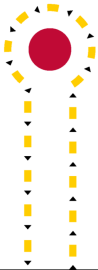


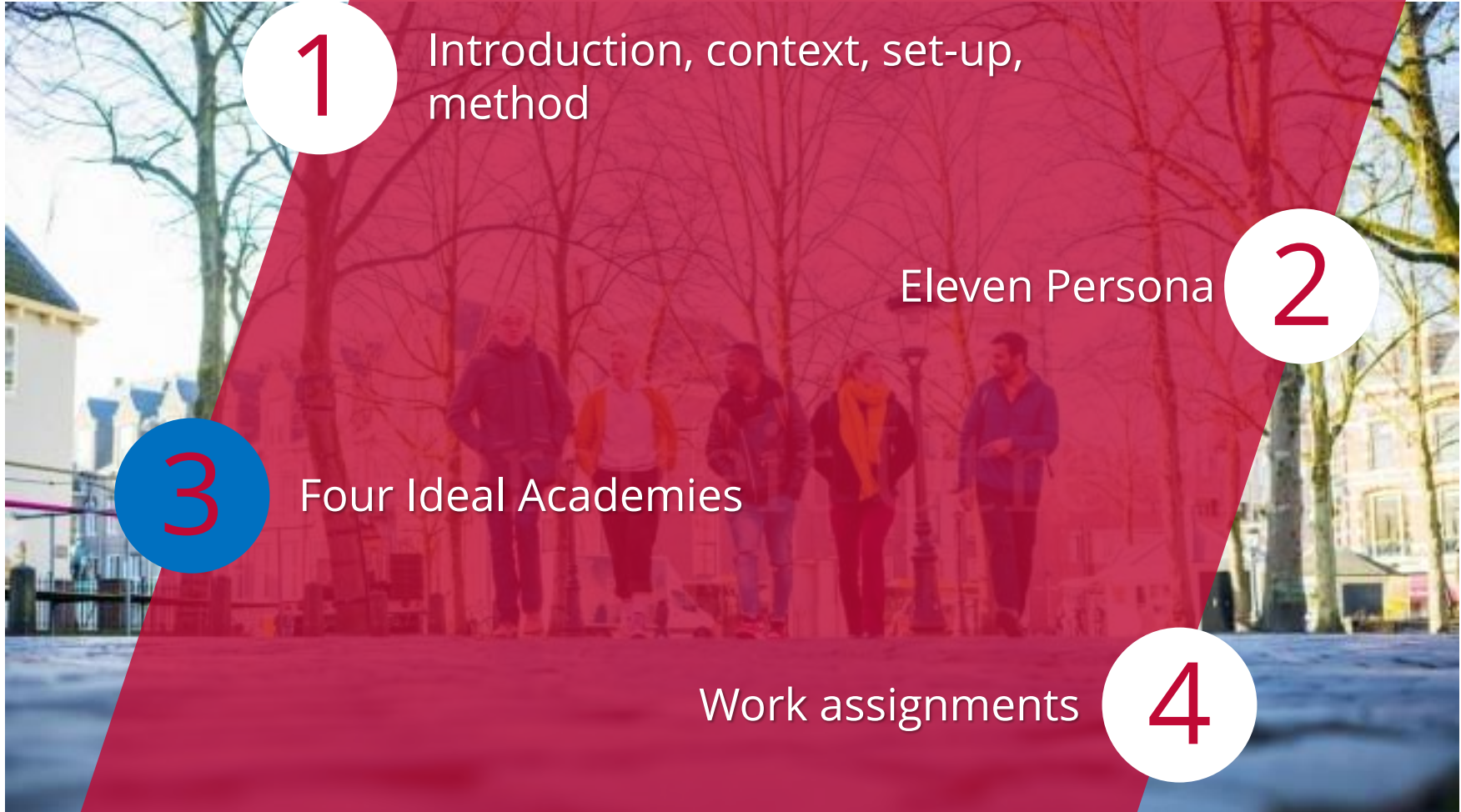
## SCHOLAR

The scholar takes complexity as the starting point for knowledge practice. This persona is inspired by the tension between theory and real world scenarios, and the interaction between very concrete events or objects and abstract concepts. The scholar has a fascination with an academic way of thinking, without taking a hierarchical disciplinary relationship as a starting point. For the scholar, their practice of science is a way of giving meaning to (one's) existence. The scholar is a true educator, and therefore has a great deal of attention for young generations of scientists and PhD students. "It can also be done differently," for the scholar means above all "you can also look at it differently." This persona pays attention to long-term investments in science, often has a fairly classical career path, and is often now a respectable scientist (in the making).

Like the visionary, the scholar does not think from a singular scientific explanation model. Although the scholar likes to be critical of skyrocketing managerial ambitions. Yet this persona's contrast to the critic can quickly be misunderstood as vague and "esoteric," whereas theoretical thinking for the scholar is a very "practical" matter. Opposed to the scholar is the administrator who is "in a meeting over money issues," and people who "think in fixed patterns."

For the scholar, good science is aware of the historical and local context in which knowledge is created. This persona is not necessarily a historian, but incorporates a certain historical awareness into one's knowledge practice. The scholar relates critically to the "container concept" of Open Science, and feels motivated to participate primarily by emphasizing that the academic institution should contribute to society primarily through good scientific education; and not just through research.





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Eleven Persona

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Four Ideal Academies

Work assignments

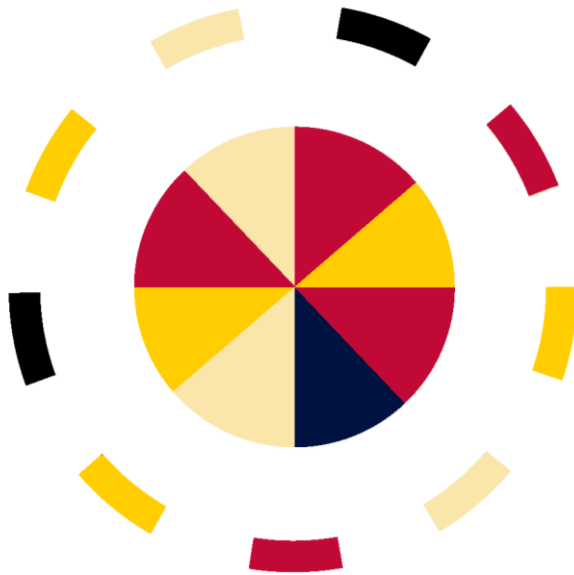
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## OPEN COMMUNITY



- Open community
- Social impact
- Interaction
- Context
- Co-creation
- Openness
- Stakeholders
- Society
- Dialogue.



## OPEN COMMUNITY

The ideal academy as an open community aims to add societal value. Through an active attitude of scholars, education and research should bring about social action in the real world. There is an explicit focus on concrete social problems and issues. Within the Open Community, there is an awareness of how the solutions and insights that are offered there are highly context-dependent. As a result, interaction with that immediate context is necessary and knowledge is created there by means of co-creation. The university therefore functions primarily as a meeting place.

Research questions and methodological approaches are defined together with stakeholders, and there is a continuous dialogue about the social implications of the results.

For this, however, it is necessary to radically reform the science system and, in particular, career structuring. Indeed, scientists within the Open Community are encouraged to engage, rather than codify their research and keep it primarily within the safe walls of the university. Therefore, within the Open Community, scientists are judged and promoted on the basis of the social impact they make, and not on the basis of publication numbers or the amount of funding they bring in. Thus, the Open Community ensures that it is a vital, responsible, and relevant part in society, and ensures that science can play a crucial role in meeting the challenges of the 21st century.

## INNOVATION CENTER



- Innovation
- Socioeconomic progress
- Competition
- Excellence
- Public investment

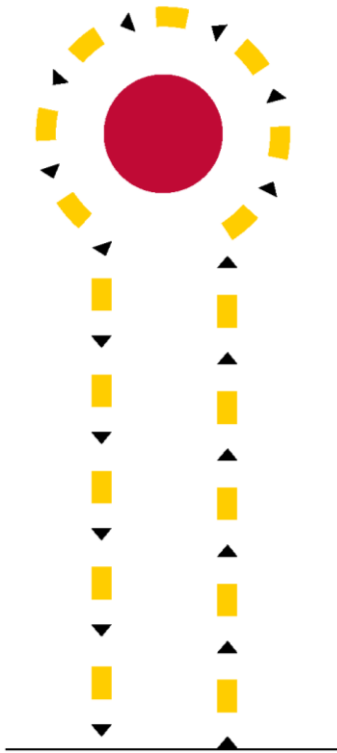
## INNOVATION CENTER

This ideal academy serves the national interest of creating social progress through mostly technological innovation with great socio-economic impact. It strives to be the very best place for education and knowledge production internationally, and sees growth as a key value. The excellent and innovative research carried out within the Innovation Center ensures widely applicable, and inventions that can be commercially exploited. Academic education must be well aligned with the labor market, and provide the personnel that the modern knowledge economy needs, and the entrepreneurs who shape the knowledge economy.

Within the Innovation Center, competition is an important catalyst of success: it stimulates individual talent and excellence. However, this must go hand in hand with radical transparency, so that science as a whole does not get in its own way and continues to operate efficiently. Specialist expertise is highly valued. By working hard and hard in teams, great strength is created. This is best done on a large scale, tightly organized in the image of an effective company. Only then can the Innovation Center compete with commercial alternatives.

Society is an investor in this ideal academy and must be able to benefit from the social return it produces. It is therefore logical that the Innovation Center should be accountable to that society. Any knowledge products that emerge from it should therefore be publicly accessible.

## DEVELOPMENT CENTER



- (Personal) development
- Autonomous
- Critical
- Open minds
- Complexity
- Playing field
- Education
- Interdisciplinarity
- Curiosity
- Small scale

## DEVELOPMENT CENTER

This ideal academy is all about developing autonomous, critical, and open minds. It focuses primarily on development and the process, rather than outcomes and achievements. By viewing curiosity, wonder, and fascination as key motivators for arriving at knowledge, individuals at the Development Center learn to relate to and enjoy complexity. Interdisciplinary education and research are inextricably linked. Academic teaching is done there by those doing research, and researchers in this ideal academy learn from the teaching they do.

The Development Center is small in scale and has a high degree of infrastructural and bureaucratic flexibility. There is as little hierarchy as possible, and a lot of room for play. For research, this means that scientists should have as much organized academic freedom as possible. There should be a lot of room to do projects that they think are important, and to try and fail within those projects. For education, this means that there should be a lot of room for choice for students, in order to discover themselves and society in full depth. The Development Center should thus become a place that relates critically to itself and to society. It is a place where social problems and structures are analyzed and problematized.

## SUSTAINABLE UNIVERSITY



- Systemic reform
- Funding
- Academic freedom
- Lower workload
- Integrity
- Transparency
- Team
- Colleagues not competitors

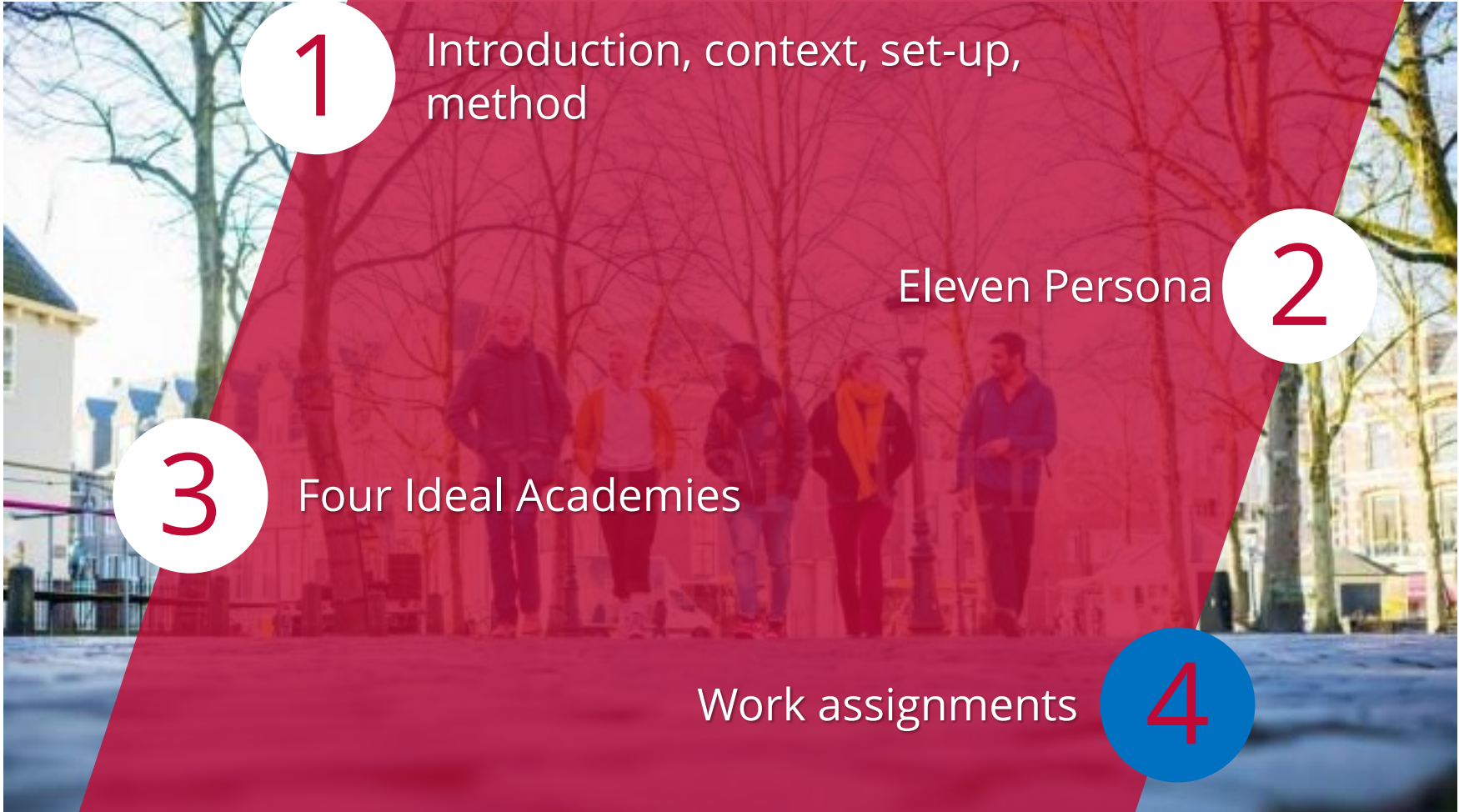
## SUSTAINABLE UNIVERSITY

This ideal academy will emerge only after the current university is thoroughly reformed and repaired. This is because today's science, with its closed, hierarchical, and competitive culture is broken. This is the result of the combination of years of underfunding, managerial thinking, and the commercialization of the scientific information infrastructure.

The Sustainable University as an improvement to the current academy arises, in addition to better government funding, from a more fair personnel policy, and an open and honest dialogue about how people want to interact within science. Moreover, the media that shape the scientific debate must be returned to the hands of scientists themselves, rather than profit-driven corporations.

Within the Sustainable University, people work together as colleagues; not as competitors. Therefore, a good balance is organized between all the tasks its staff is expected to perform as a team - whether that is research, teaching, leadership, or interaction with society. Adequate funding allows for the hiring of sufficient staff to properly perform core tasks. This creates a lower workload. Moreover, a healthy working relationship is a top priority: the flexible shell is almost non-existent at Sustainable University and permanent contracts are the norm. There is confidence in the good things that researchers do with the funding entrusted to them - which preferably runs via the university itself rather than external money flows. Within the Sustainable University, academics are given the freedom to make their own decisions, with as little accountability as possible through bureaucratic policy devices or external parties.

Within this healthy and well-functioning system, there is all the peace and space needed to do high quality science with integrity. By not focusing on excellence, but on normal research, room is created for a more robust way of working. The sharing of research data, transparent peer review, and careful and transparent methodology are the starting points. It is precisely this robustness that lays a firm foundation for science as a democratic institution that society must take good care of.



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## WORK ASSIGNMENT

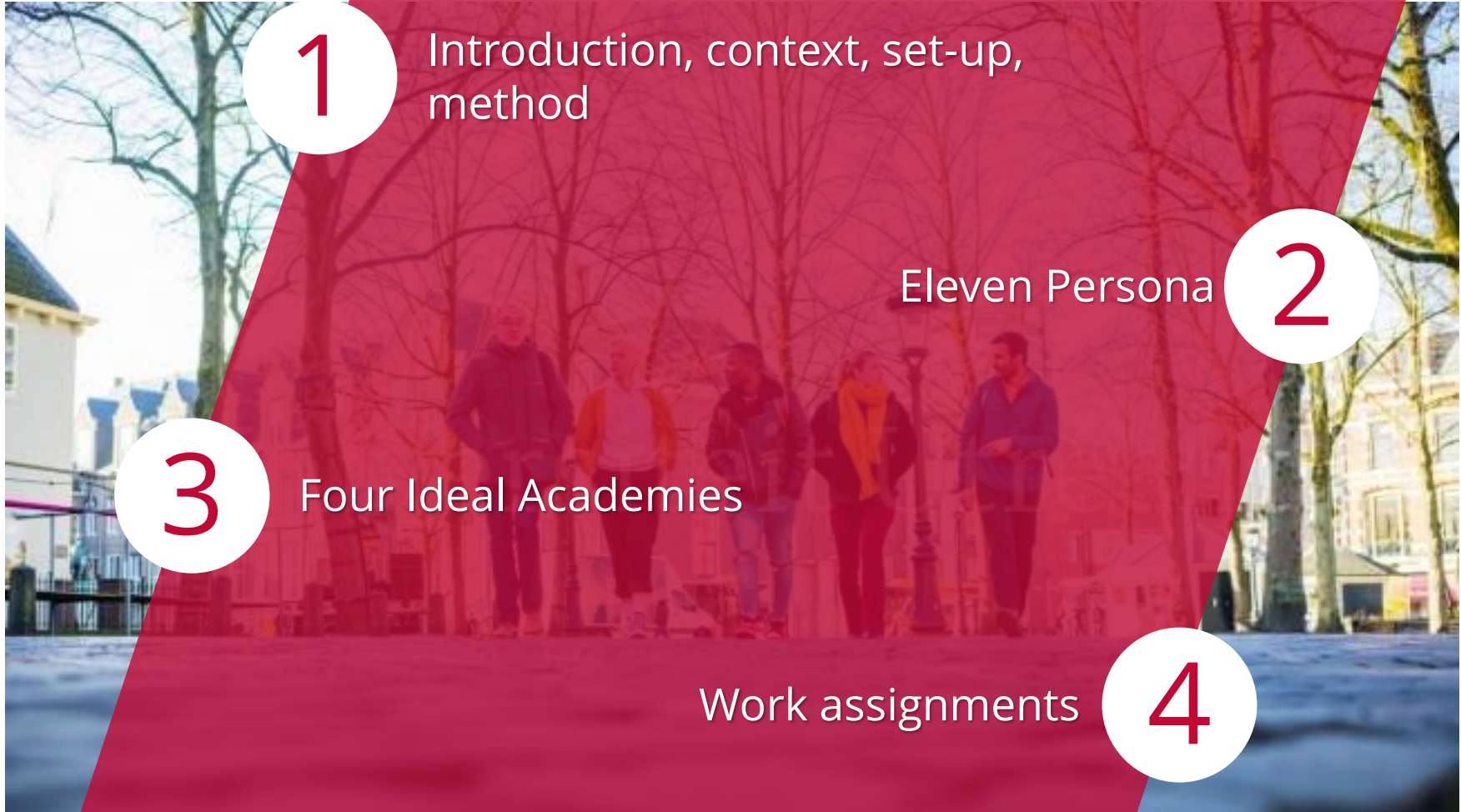
During the class we will use the results of Faces of Open Science to get you to think about your Open Science identity.

During the day we will discuss your first impression of this way of looking at science, debate from a particular perspective about a thesis/statement and make our personal Open Science/persona profile.

Preparation:

Listen to the podcast about Faces of Open Science on the R2OS (Road 2 Open Science) (Spotify)

Read the outline and keep in mind that you will have to impersonalize one of these persona in debate and you will relate your own open science identity to these persona.



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Sharing science, *shaping tomorrow*

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