

## **Wicked Problems: Threats and Opportunities**

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### **ABSTRACT**

Wicked Problems also known as irregular conflicts are defined by “contradictory and changing requirements, multiple stakeholders, many interdependencies, and problems that keep evolving.” (Kramer 2011)

Conflict contexts are by their very nature complex and require comprehensive analysis to understand, design and implement responsive interventions. These interventions which should ideally aim at addressing the root causes of violent conflict are best carried out by those who live within the context, who through hard work and various confidence building measures, have gained trust and credibility with the different “sides” of the conflict.

However, because irregular conflicts are so dynamic, it is necessary to adapt to their pace by not only understanding the conflict but keeping up with changing forces and factors that affect the conflict. This therefore means that both threats and opportunities exist which can be identified and utilised to make a difference.

The process of identifying the threats as well as opportunities to transform these irregular conflicts into more productive rather than destructive states may seem like a tall order in the heat of episodes of violence; but the approach of multi-track diplomacy, inclusive and bottom-up approaches has been shown to bring about more productive outcomes and sustainable cultures of peace in conflict affected communities.

With the exponential increase of wicked problems all over the world at every level, this presentation aims not only to highlight the challenges and threats they present but also how we can leverage evolving opportunities even within the most complex conflict contexts.

**KEYWORDS:** conflict, problems, violence, complexity, diplomacy, threats, peacebuilding

## 1 INTRODUCTION

If there is anything that is certain, it is conflict. Conflict is not in itself a bad thing, infact, it is natural, and it is productive – when it doesn't lead to violence. Conflict has many definitions, can be productive or destructive and in its simplistic forms, it can be said to be a difference of positions or opinions or needs.

“Some present conflict as a natural phenomenon, others as an alien or abnormal happening in social life, and yet others consider it as a necessary condition for the development and growth of individuals and societies.” [Council of Europe-European Union 2013]

Galtung (1969) defines conflict as “a dynamic process in which structure, attitudes and behaviours are constantly changing and influencing one another,” which very well describes the concept of irregular conflict or wicked problems.

Tjosvold and Van de Vliert [1994] share that “conflict is understood as incompatible activities which occur within co-operative as well as competitive contexts.” Which highlights the possibility that conflict can result in either positive or negative outcomes as well as the fact that conflict can happen within co-operative and healthy relationships.

Simply put, if you have you ever been faced with a situation that seemed to have no resolution, no end and keeps getting worse with time, then you are facing an irregular conflict or wicked problem.

For the purpose of this paper, the terms “Irregular Conflict” is also referred to as “Wicked Problems” and both terms are used inter-changeably.

“A wicked problem is a social or cultural problem that's difficult or impossible to solve because of its complex and interconnected nature. Wicked problems lack clarity in both their aims and solutions and are subject to real-world constraints which hinder risk-free attempts to find a solution.” [Interaction Design Foundation n.d]

In addition,

“Irregular conflicts generally will merit the description of a wicked problem. Such conflicts are often multicausal, unstable, and present problems that keep evolving. They are socially complex, involving multiple stakeholders and many interdependencies. They often have no clear solution, and, in any event, solutions often are not right or wrong but rather better or worse or good enough. Frequently, solutions require changing behavior, where it is necessary to motivate individuals, and attempts to generate solutions can lead to unforeseen consequences. Finally, it is hardly ever the responsibility of one organisation to provide solutions.” [Kramer 2011 p. 83 - 84]

Key identifiers of wicked problems that we want to explore further in this paper are:

- That they are extremely complex and involve numerous interacting influencing factors, every changing dynamics and actors.
- That extensive analysis and multi-track diplomacy are good approaches to understanding and addressing wicked problems.

- Wicked problems are unique and provide opportunities to learn and adapt.

Infamous protracted violent conflicts around the world have the tendency to leave the situation locked in a continuous cycle of violence. Unfortunately, too many examples of such conflict exist including in Afghanistan, Civil War in Myanmar, Palestine and Israel, Syria, and Yemen, to mention a few.

Lots of more recent violent conflict are occurring like the Ukraine-Russia, Tigray- Ethiopia, Nigeria, Haiti, Central African Republic, Democratic Republic of Congo, Kurdish Groups - Turkey, Civil War in South Sudan, Somalia - Al Shabab to mention as few.

As a matter of fact, the Centre for Preventive Action lists 27 ongoing active conflicts around the world as of October 2022.

This does not include numerous volatile local conflicts situations and violent events including kidnappings, banditry, drug cartel violence, land disputes, coups and instability due to violent extremism.

Wicked problems tend to become more complex with time especially when actors take unpredictable actions that exacerbate the conflict.

We want to take a closer look at the key identifiers of wicked problems as mentioned in the introduction above, bearing in mind that the list is not exhaustive, but can illustrate some of the most relevant threats and opportunities.

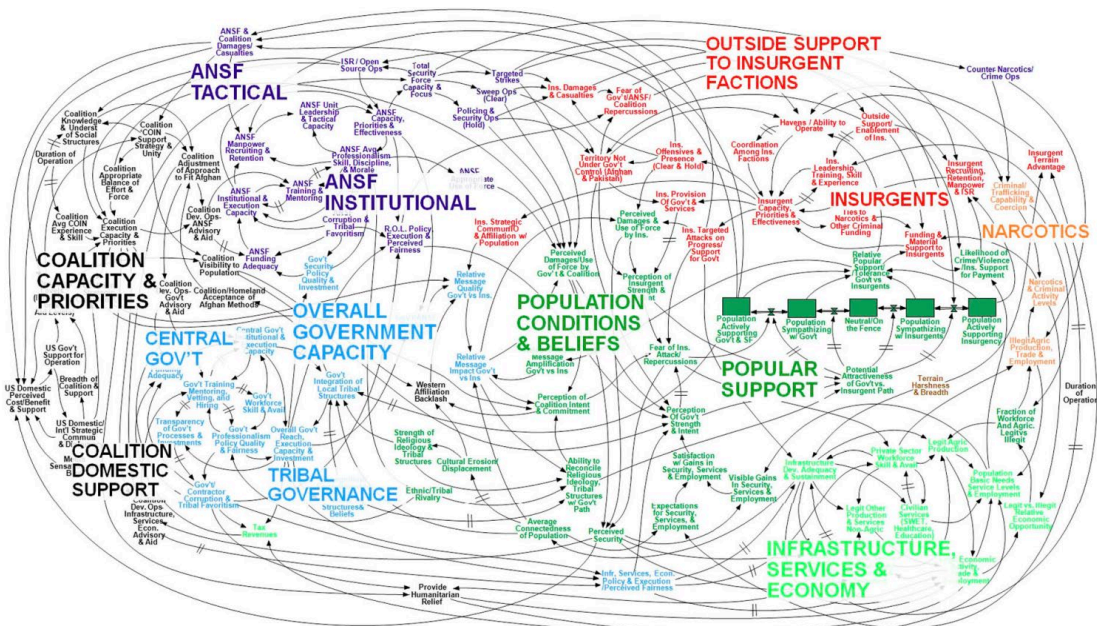
## 2 WICKED PROBLEMS AND COMPLEXITY

One of the most aggravating factors of wicked problems is the fact that they grow in complexity over periods of time and recognising this is key. Sometimes the time within which this happens is not even far spaced and changes can happen over a period of hours or days. It is therefore helpful to approach wicked problems conflict using systems thinking. This makes the conflict analysis flexible to better understand the complexity of the conflict.

“Systems thinking often involves moving from observing events or data, to identifying patterns of behavior overtime, to surfacing the underlying structures that drive those events and patterns. By understanding and changing structures that are not serving us well (including our mental models and perceptions), we can expand the choices available to us and create more satisfying, long-term solutions to chronic problems.” [Goodman 1997]

As is expected for every conflict management and peacebuilding practitioner or organisation, a good understanding of the conflict context is needed for any kind of meaningful intervention to happen. Even for problems that are not “wicked,” there is a need for a deep analysis and zooming in on contextual factors to facilitate understanding of the situation. There are many tools for conflict analysis which became a strong concept in the peacebuilding space after World War II, when the field of conflict resolution started to emerge in the 1950s/60s.

Applying systems thinking means we are recognising that the problem is intractable, important, familiar, yet unfamiliar and other approaches have been applied without success. Systems thinking therefore acknowledges complexity and can be a very helpful tool not only in the analysis of a wicked problem but also as a monitoring approach to keep up with the changing dynamics of the conflict. If one was to take a systems approach to understanding the conflict in Afghanistan in 2010 for example, this is what a systems map could look like.



Visual One: A Dynamic Systems Model of the Afghanistan Conflict (The New York Times, 26 April 2010 - Wiley Online Library)

There are multiple detailed, diverse tools to support conflict analysis which include but are not limited to the onion (positions, interests and needs), force field analysis (driving forces-positive forces for change, restraining forces-obstacles to change), actors and community mapping, conflict tree, iceberg, gender generator analysis etc. These tools help us to get a holistic view that can only go so far, and must be integrated with systems thinking i.e., relationships, patterns, underlying and even historical dynamics. We must avoid the tendency to oversimplify conflicts and take the more convenient route of linear and simplistic thinking which suffocates the ability to see the conflict from its many sides, types, levels and dimensions.

For example, a simplistic way of thinking of a conflict could be that there are only two sides of a conflict, which in itself is such as limited view when in fact multiple actors are involved. Additionally, we may see an episode of violence as the cause of a wicked problem without examining the deeper and multiple cultural or structural violence manifestations or causes related to that episode. For example, a suicide bombing is an episode while there are deeply rooted issues of land occupation and human rights abuses (structural violence).

In wicked problems, complexity must be fully embraced as one of the very essences of that problem. Nothing should be taken at face value and the inter-relatedness of actors and their actions taken into account.

While complexity of the wicked problem may seem more like an aggravating factor, it actually provides an opportunity for certain possibilities. These possibilities include a representation of diverse and even converging mindsets on different sides of the conflict.

For example, as the visual illustrates below, it is possible that people on different sides of the conflict share the same views, even though they vocalise different positions influenced by their identity groups.



**Visual Two: Intersection of Needs-Different Positions and Identities. (Ibn Garba 2022)**

Complexity in wicked problems must be accepted and leveraged to collate converging views or better still needs, as these are the deepest levels of motivations for the positions we take and interests we voice on conflict issues. A key mistake would be to deny such complexity exists and deny the ever-changing dynamics of the conflict situation.

A good way to think about complexity is an international team working for a corporation. Having staff working both remotely and onsite from multiple countries surfaces a beauty in diversity that is good for business. For example, different products can be customised to different audiences and customers, promotional items and service announcements can be produced in different languages and multi-national creativity can be utilised to develop innovative ideas.

Another aspect of complexity within wicked problems is the way the relationships, intra and inter-group dynamics play out. Key questions to always consider are what is happening within the conflict groups and between the conflict groups. How are decisions being made within (intra-group)? How much support do leaders and influencers have? Are there dissenting voices? Is it a case of blind obedience to authority? Chosen trauma?

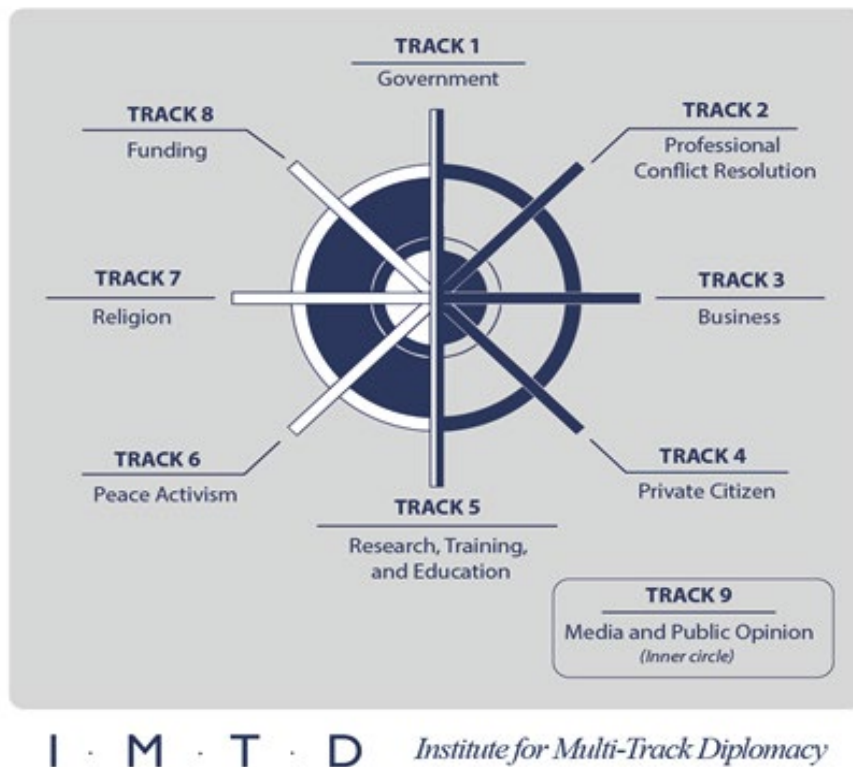
What happens when the different groups come together (inter-group dynamics)? How do actions like the misuse of media, hate and harmful speech, invasion of territory, use of cyber warfare, torture of prisoners of war, sexual violence as a weapon of war, use of high-tech un-manned war technology etc. serve to fuel the wicked problem? Are there any kinds of insights or common ground that emerge when the groups come together? Is there any chance of moderates on each side agreeing to dialogue? What happens when people share different identities from different groups (as identity is a dynamic concept) for example, a youth whose mother is a member of civil society from the example above?

Complexity is another reason why wicked problems are best addressed by those directly affected by the problem. Not only because they are the experts on the issue (local knowledge and expertise while making allowances for biases), affected directly by the effects of the wicked problem, but also because they themselves are part of the changing dynamics of the wicked problem. Their actions and reactions all feed into the ever-changing nature of the wicked problem and awareness of how their actions are increasing the wicked problem might be an effective way of getting them to at least take a step back and reflect.

The place of diplomacy in wicked problems cannot be overemphasised in its ability to transform the nature of wicked problems.

McGlinchey defines diplomacy “as a process between actors (diplomats, usually representing a state) who exist within a system (international relations) and engage in private and public dialogue (diplomacy) to pursue their objectives in a peaceful manner.” [McGlinchey 2017].

While there are many models of diplomacy tracks, we would like to focus on Track Four and Six of the nine track Institute of Multi-Track Diplomacy [IMTD] model as shown below.



**Visual Three: Nine Tracks of Multi-Track Diplomacy (IMTD)**

Introducing multi-track diplomacy into the complexity of a wicked problems allows for inclusion of vulnerable groups and utilising bottom-up approaches for effective analysis and action planning.

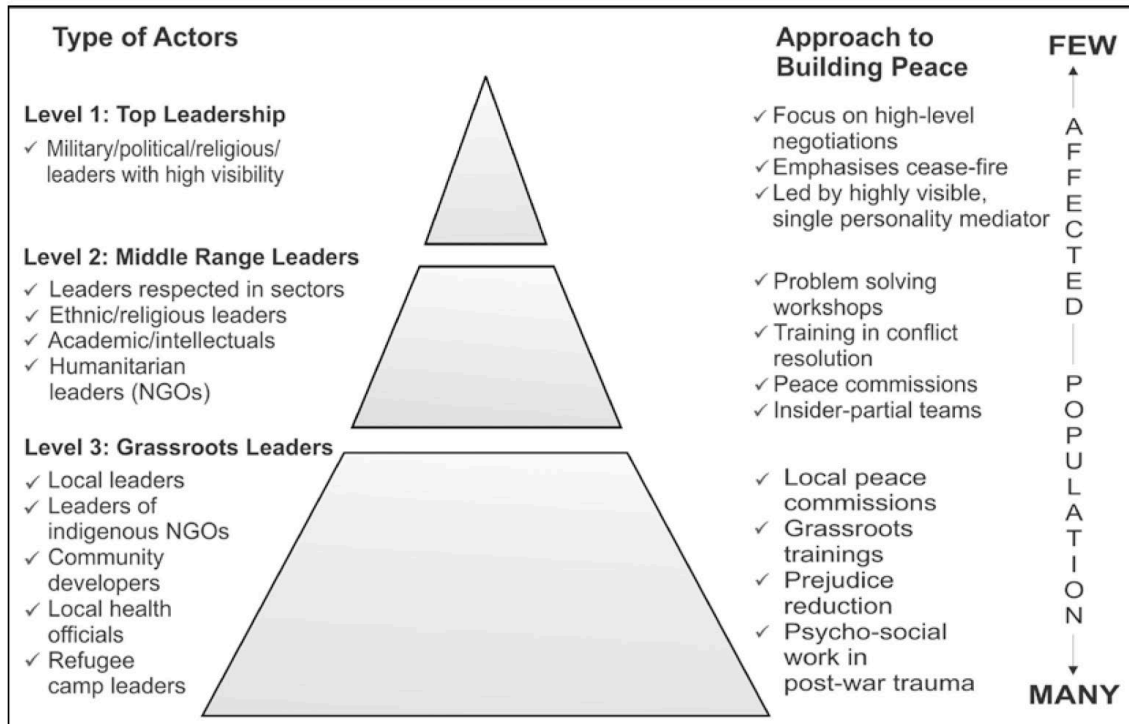
While more vocal and visible groups also lend their voices into the dialogue, the intention of diplomacy is to ensure that those who have influence can use their influence at their various levels, even if that means influencing oneself. Multi-track diplomacy contributes to addressing the conflict by bringing in unique perspectives and wisdom from lived experiences. Tracks Four and Six are particularly useful in the context of wicked problems and are described below:

- Track Four – Private Citizen, or Peacemaking through Personal Involvement. This includes the various ways that individual citizens become involved in peace and development activities through citizen diplomacy, exchange programmes, private voluntary organisations, non-governmental organisations, and special-interest groups; and
- Track Six – Activism, or Peacemaking through Advocacy. This track covers the field of peace and environmental activism on such issues as disarmament, human rights, social and economic justice, and advocacy of special-interest groups regarding specific governmental policies.

Leveraging on diplomacy as part of the system of the wicked problem could bring even more clarity and options for action.

Lederach another “father of peacebuilding” also augmented the call for applying multi-track diplomacy in light of the need for holistic approaches that includes levels of and interrelationships between conflict actors.

This is illustrated by the below visual of the Peacebuilding Pyramid.



**Visual Four: “Peace-Building Pyramid” from Lederach J. P., Building Peace: Sustainable Reconciliation in Divided Societies, United States Institute of Peace Press, Washington, DC, 1997, p. 39.**

All in all, embracing complexity and being open to diverse tools and methods to understand and intervene in wicked problems is essential.

This can help us surface not only the threats, but opportunities wicked problems present.



### 3 WICKED PROBLEMS AND LEARNING FOR ADAPTATION

While we undertake conflict analysis, systems thinking and multiple tools to better understand the wicked problem, what comes out of all that work? I would argue that we learn.

Simply put, learning is when knowledge acquired through being taught or experience. It is a process that enables change to happen due to new insights and worldviews. Learning does not just happen within the four walls of a classroom but is part of our everyday experiences, consciously and unconsciously.

Learning is “a process that leads to change, which occurs as a result of experience and increases the potential for improved performance and future learning” [Ambrose et al, 2010, p.3]

It is important to know that learning can result not only in changes in knowledge but also attitudes and behaviours which are the key desired outcomes of peacebuilding. Through learning, we can see things differently and shape new narratives that can lead to peaceful outcomes.

Many learning theories exist, like constructivism, behaviourism, cognitive, humanism and connectivism but for this section, we would want to focus on a model rather than a theory. A model that is pertinent to adaptation since we have already acknowledged that wicked problems cannot be addressed in a linear manner.

Scholarly literature defines two major two main organisational learning levels which are adaptable to the context of wicked problems: single and double loop learning.

“Single-loop learning is one of the problem-solving processes. Individuals usually examine the environment, compare data with the norm, and then initiate an appropriate action. Individuals look at what options they have and fix the problem. They respond to changes internally or externally by discovering and amending mistakes to maintain the features of the organisational norm. On the other hand, double-loop learning is the process of comparing the situation with the norm, questioning whether the norm is appropriate and justifying whether this is the best means of doing things. The current organisational norms will be questioned to, may be, establish a new set of norms. The organisation is involved in questioning and modification of an organisation’s underlying norms, procedures, policies, and objectives. The process involves changing the knowledge-base or firm-specific competences or routines. Double loop learning is shown to be more suitable for undertaking the existing turbulence and invariable change in the environment.”  
[P. Kantamara and V. V. Ractham 2014 p. 54]

These approaches are easily transposed unto the system of a wicked problem and key differences to take note of are that double loop learning involves continuous inquiry, modification and building competencies to meet up with the changing context. This approach is recommended for ever-changing and complex problems that cannot be addressed linearly.

“Behavioral double-loop learning entails changes in values and frames governing how people interact. For example, rather than suppressing or avoiding conflict, people may learn to surface and resolve conflict. Rather than assuming their own or their group’s point of view should prevail and strategising to make that happen, they may learn to invite other perspectives. Rather than leaving difficult or embarrassing issues unspoken, they may learn to raise them. This kind of double-loop learning increases the learning capability of an organisation (*for the purpose of this paper- a system*). It makes it more likely that assumptions underlying current ways of dealing with technical, instrumental, and policy issues will be identified and questioned.” [Putnam 2014]

Cartwright applies the analogy a thermostat to further explain single and double loop learning:

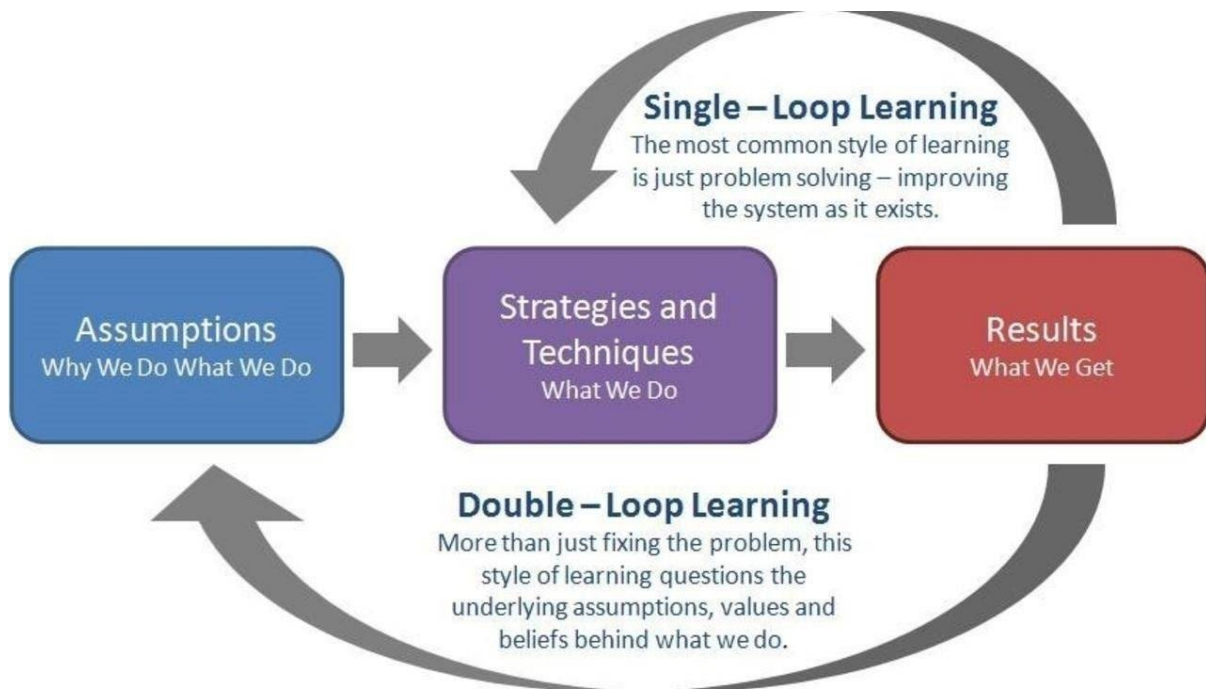
“Single-loop learning is about achieving a given temperature--like a thermostat set to 68 degrees that turns up the heat whenever the temperature drops below 68 (the objective). Double loop learning calls for changing the objective itself. Indeed, double-loop learning is not only about changing the objective, but involves questioning the assumptions about that objective, the ways of discovering and inventing new alternatives, objectives, and perceptions, as well as ways of approaching problems.” [Cartwright 2002]

Lannom states that single loop learning does little more than a provide a “band aid” solution to symptoms of problems and “it will never “step outside the box,” take a long look into all the organisational intangibles; and does not consider the interdependency of the organisation’s systems.” [Lannom 2016]

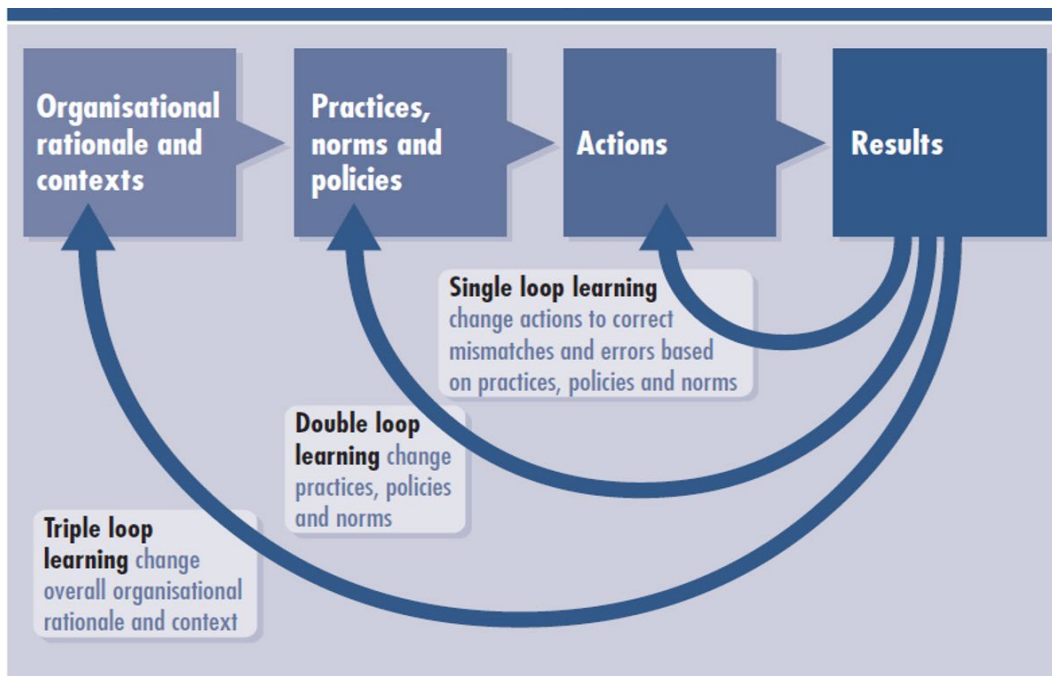
Positive discuss on the approach of double loop learning are numerous.

“Double-loop learning helps people acquire and integrate new information and develop new skills, to question and possibly discard familiar and perhaps dysfunctional ways of thinking, feeling, and acting.” [Cartwright 2002]

The visuals below illustrate models of single, double and even triple loop learning to show the iterative process and how each element feeds into one another. We may or may not be able to apply triple loop learning especially if we do not have the authority to overhaul entire systems and sense of being (which only actors in the conflict can and even so only within their own spheres of influence). Therefore, double loop learning is a great way to approach learning and adaptation in complex systems like wicked problems.



**Visual Five: Double Loop Learning & Leadership Development (Invista Performance Solutions 2016)**



**Visual Six: Argyris, [1977](#); Argyris and Schön [1992](#); Sinek, [2009](#); Ramalingam et al. [2009](#); Roche, [2010](#); Ørnermark, [2015](#); Prieto Martin et al. [2017](#); Cabaj, [2019](#)**

Finally, what is the practical application of double loop learning to enable continuous learning and adaption in the context of wicked problems? What kind of questions does double-loop learning help us ask? Let us look at some examples.

- What have we been assuming about this problem?
- What have we been assuming about the people involved?
- What have we been assuming about what our leaders do and say?
- What have we been assuming about the environment, resources and assets?
- What have we been assuming about our own responsibility or the part we are playing?
- What kinds of questions should we be asking?
- Are we afraid or trying something new? If yes/no why?
- What new things can we try?
- What are the risks involved?
- How can we mitigate risks?
- Are there any other people we want to get involved?

To end this section, we highlight that learning and adapting through wicked problems can surface threats as well as opportunities, but that they can lead to changes in dynamics, attitudes and behaviours.

## 4 CONCLUSION

In conclusion, we can make certain assertions from our brief exploration of wicked problems and the threats and opportunities they bring our way. These include that:

- “Wicked Problems” are also known as “Irregular Conflicts” refer to difficult conflict contexts where the context is continually changing, involve contradictory and changing requirements, consist of multiple stakeholders, many interdependencies, and problems that keep evolving in terms of relationships, actors and dynamics between them.
- Complexity is an essential element of wicked problems and should be embraced and leveraged. Wicked problems give us the opportunity to embrace complexity and discard linear and rigid ways of seeing our world.
- Wicked problems are greatly affected by actions of the involved actors and external factors so must be continually monitored.
- Analysis is key to understanding current and ever-changing contexts of wicked problems. We should not take for granted and assume we are familiar with the contexts of wicked problems; and therefore, get comfortable thinking we know the solutions to everything.
- It is pertinent to apply multiple approaches and tools to better understand wicked problems as this facilitates the possibility of making relevant interventions.
- Multi-track diplomacy and ensuring vulnerable and all groups are included in analysis, dialogue processes as well as actions is a good way of approaching addressing wicked problems.
- There is no one-size-fits-all-right answer to wicked problems, infact, every wicked problem could be said to have its own unique response and transformation possibilities.
- Double-loop learning is a good approach for analysis of wicked problems enabling us to question our assumptions and prepare us to try new ways of doing things.
- Wicked problems give us the opportunity learn and adapt.

In light of the above, we will conclude by acknowledging the existence of wicked problems and while they present real and tangible threats, can also be opportunities for learning, new attitudes and behaviours.

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