Research Essay

# The Solution to a Deadlocked Conflict Is a Leap to a More Global Level - Logical Fields and the Dynamics of Change

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#### **Abstract**

The point of this paper is to explore the dynamics of the thinking process, especially the nonrational, analogical, and systemic aspects of natural thinking that create an interdependence between our thoughts, beliefs, and behaviors. There is an extreme diversity in the way humans think, despite the existence of patterns of thought or Logical Fields, that feed individual and collective mental models. The Logical Fields Model based on systems theory, provides an evolutionary and dynamical formalization that accounts for both the patterns of thought and their exquisite diversity. It is applied here to the understanding and strategic resolution of the spiral of Hate-Violence in ethno-political conflicts. The model proposes that a deadlocked conflict can only be broken by creating a conceptual model and organization at a higher, more encompassing level: in brief, by creating a meta-logfield. Then the democratic vision, as a shared planetary cooperation for the well-being of the variegated peoples of Earth and the planet (as opposed to special interests groups and lobbies) and the problem of accountability will be discussed.

**Keywords:** Systems theory, logical field, thought-process, group-thinking, ethno-political conflict, conflict resolution, semantic fields theory, democracy and accountability, governance.

# 1. A Plurality of Logics: Logical Fields

From the Greek philosophers onward, logic has been traditionally defined as the strict application of rules of inference and deduction. It has been equated with pure reason (Aristotle, Kant, Descartes, etc.), while the principle of reason was itself equated with the principle of causality (Leibniz, Heidegger). Both Leibniz in his Monadology and Heidegger (1992) have clearly stated that causality is only one type of link between concepts or events – among many other types of links (Hardy, 2001). Thus, if I use the basic rule: If A = B and B = C, then A = C, to explore the problem at hand, I get: If logic = reason, If reason = causality, If causality IS only one type of link, then logic IS only one type of link.

In brief, the logic (that is defined as reason and causality) is only one type of link between concepts/events, among many other possible linkages. Logic can now be redefined thus:

#### [A] Logic is a qualitative connection between semantic elements

where 'semantic elements' refer to any concepts, events and processes happening in a mind or cognitive system and concurring to the generation of meaning. Logic, in other words, is how our

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mind connects cognitive events or concepts and makes sense of the world. Therefore:

#### Logic is the process of connecting semantic elements, in its qualitative [B]singularity

Thus, while logic in a classical sense is a fixated formalization (or matrix) used to structure thought, it is, in a wider sense, a connective dynamic making use of a variety of specified (or qualitative) links. Inference is only one of these specified links, other ones being the very diversified semantic linkages found in connective logic – such as analogy, metaphor, symbolism, and the like (Bertalanffy, 1967; Beer, 1966; Hardy, 1998) - which are spontaneous and nonrational processes of natural thinking (Reber, 1995). Hence the need for a concept describing a pattern of logical links, which I call Logical Field.

In this sense, Quantum Mechanics (QM) is a specific logical field (as is any sub-domain of science) in which the organization of links and concepts (e.g. in equations) is quite different from, say, relativity theory. Similarly, systems sciences show an interesting logfield shift from Beer's cybernetic model to Checkland's Soft Systems methodology. Logical fields describe the particular organization of concepts and the thought-process not only in scientific subdomains, but also in natural thinking. If we remain in the domain of abstraction and mathematics, the term logical field becomes redundant with 'formalism' or 'framework'. Now, if we use the Semantic Fields Theory, which poses that the basic and underlying thought-process is a spontaneous connective dynamic, then we are looking for different types of (natural) logics participating in the personal and collective creation of meaning and concepts. Let me define the concept of logical field:

[C] A Logical Field is a natural self-organizing system of the thought-process that instantiates a specific, more or less flexible, organization of links between concepts, events, and objects, and thus triggers a particular patterning of thought, hence of feeling and behavior.

Logical fields (or logfields) are thus akin to Piaget's schemata, Beer's thought-blocks, and generally to the concept of mental models (Senge, 1990; Argyris, 1991); however, whereas mental models are viewed as fixated, logfields are continuously being created, reinforced, or else modified. They are nearer to Checkland's concept of Weltanschauung (W) or worldview, in Soft Systems Methodology (SSM), about which he says (1999, p.219) "The methodology emerges as a learning system in which underlying Ws are exposed and debated alongside alternatives."

#### The flexible versus fixated ratio in logical fields

Since they are the natural ways our minds operate, logfields tend to show flexibility and enormous adaptability, so that they may be used in many different situations. They reflect how the mind conjointly extracts patterns from the environment and creates its own thought-patterns to make sense of itself and the world. Confronted with a new situation, already existing logfields in the mind will be matched against the patterns emerging (or extracted) in the ongoing creative cognitive process, and will be made to adjust to them, thus enabling recognition and the generation of meaning. In the process, logfields may undergo subtle or drastic changes – such as adaptation, merging, recombining, or even the creation of a new logfield. The flexible vs. fixated

ratio will be a way to assess both creativity/health and fixation/pathology in a given mind or group-mind. Too extreme a flexibility, insofar as it precludes the healthy creation of patterns, will not allow for a meaningful world. On the other end of the scale, extreme fixation is a sign of a traumatic, pathological, despotic, or fanatic thought-process. This is reminiscent of the concept of *requisite variety* in Viable Systems Model – which state that organizations must develop sufficient internal *variety* to be able to understand, adjust to and cope with a complex changing sociocultural environment that itself exhibits high variety (Beer, 1979).

#### Organizational variables

Sorting out the organizational variables of logfields means finding what, in a mind, is able to steer (or modulate, or modify) the natural connective dynamic. The four main variables informing logfields (and thus the thought-process itself), are Value-Purpose (mind), Feeling-Relational style (psyche), Behavior-Action (body), and Interaction with the (social and natural) environment. Any of these variables can be given predominance, however they keep interacting and co-creating the logfield in a systemic way.

Thus, in order to describe, and eventually predict, the thought-process of individuals or groups, parameters quite foreign to rational thinking and goals must be taken into account. Natural thinking is not a chess game and the priorities are not always "one's own best interest" as game theory would have it. On the contrary, the global development of thought, as well as congruent decisions and behaviors, will have everything to do with deeper *moteurs* of semantic processes – meaning, feeling, community (Husemoen and Zhang, 1999) – those very forces through which we create meaning for ourselves, our community, our sociopolitical and philosophical networks, and the world.

# 2. Group-mind and Collective Logfields

A group (or network), when constituted around some core concepts and/or socio-political actions, creates a collective logfield. The gathering of people around shared *values* form the basic system-organization of most scientific, humanitarian, green, socio-political, and religious, associations. To values are attached *connective-logic propositions* (expressing procedures and know-how) and an underlying paradigm. Three other variables interact in a logfield: behavior, affect, and the environment.

#### Values and connective-logic propositions

The values shared by a group are generally spelled out clearly (as for example a political agenda, religious beliefs, or basic concepts in a theory). However, these values show an underlying coherency grounded in a paradigm (a scientific, sociopolitical worldview; Kuhn, 1970) that often is not recognized consciously because its blind assumptions are not even disentangled from what constitutes "reality" or "truth". Additionally, the logfield contains basic connective-logic propositions (Hardy, 1998) used regularly by members that reflect the heuristic knowledge accumulated by the group-mind. They may for example be judgments such as "It's better to do X than Y", "A often means B in this context", and the like. They are for the most part rules-of-thumb about meaning and procedures, about the topological organization of patterns, transformative processes, contiguity, and the internal (albeit not causal) evolution of patterns. While such loose propositions may sometimes resemble rules of formal logic, they remain

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fundamentally different from them. First, they are not strictly causal or deterministic (Hardy, 2001); second, they convey a global (as opposed to detailed) understanding of patterns; and three, far from being invariant and two-dimensional (either true or false), they allow for self-organization and adaptation to changing contexts. The extreme usefulness of connective-logic propositions in real-life situations is precisely stemming from their enormous flexibility, which keeps them widely open to possible partial misfits with real patterns-in-context — what constitutes the feedback from the environment. In case of a partial misfit, these propositions allow for on-the-spot tinkering, divergent or plural interpretation ("It could be this or that"), adaptation, modification or even total restructuring of the connective proposition.

#### **Behavioral codes**

A group may endorse very stringent behavioral rules, such as in the military, a specific sport, or else in extremist groups. Strict behavioral codes generally go hand-to-hand with fixated values being enforced on members, since they will be derived from these values. An example is religious fundamentalism, in which a set of broad "truths" and concepts constituting a religion is, as Stengers (1987) explains it concerning science, stolen from a context carrying high credibility and used to give more weight to a less credible context – here a fundamentalist credo and extreme behavioral codes. The resulting particular enacted-dogma will then be imposed on individuals, while sold to them as the 'pure' form of the religion.

Of specific interest is the fact that people may be attracted by any single part of the dogma-system – that is, antique truths and root-philosophy (thus confusing conservative minds), the fundamentalist credo itself (with its clear racist and despotic connotation), or worse, the very extremist behaviors themselves. Only in some cases will strict behavioral codes exist while no immutable values are set forth, such as in sport. Most social groups show loose behavioral codes, coherent with the group values (e.g. a member of a green association will tend to respect nature). Members of a group will tend to be more and more influenced in their behavior by the values they have adopted. And vice versa, a member attracted by a specific activity (e.g. watching dolphins at sea) will progressively tend to adopt the values inherent to the group he has joined.

#### **Shared feelings**

In any given set of values, there is a range of feelings deeply intertwined with it. For example, the way an ecologist understands the deep interconnection of natural systems will lead her to have a keen grasp of human relationships and subtle inter-influences, and to develop a sense of dialogue and negotiation (in contrast to an authoritarian style). Feelings are also closely interconnected with behaviors, the one feeding into the other. Thus, a profound respect for natural systems will generate protective behaviors and lead to developing respectful interactions with fellow humans.

#### The complex organization of logfields in society

If all professions, sciences, and constituted groups can be represented as logfields – expressing a particular way to think and interpret events – then how does this large variety of logfields coexist in a given society, or in our mind for that matter, since we get to use more than one logfield? We may view the various logfields' organization as similar to that of networks of neurons in our brain. On its boundary, each logfield interfaces with logfields specifically related to it, more or less deeply, and it also interfaces with basic social logfields (such as the political system, the

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law, etc.). There exists in a society a consensual worldview at any given time (the Zeitgeist) that includes values and behaviors. However, and fortunately so, there are a number of competing worldviews stemming from diverse philosophical, scientific, and religious, perspectives – especially in periods of great social change, as is the case now. The logfield of the business world, for example, is undergoing a deep transformation from a focus on profits toward valuing collaborative networks of responsible individuals and a "shared vision" as in Senge's (1990) "learning organization". This business-logfield will undergo an even greater transformation when shifting its short-sighted profits-based logfield to one addressing the climate crisis and adjusting to the necessary strategies to reduce green house gases emissions – one we could call a *green-profit logfield*.

## **Summary**

Logfields expressing various knowledge-systems influence the thought-process of individuals and groups (their natural connective logic), as well as their values, behaviors, and feelings. The complexity of the *Logical Fields Model* (weaving several levels of a cognitive system) allows for interesting insights. First, reason is neither controlling thinking, nor the main factor in behavior. Second, each variable is in deep interaction with other variables at other levels, that is, all mental and psychological forces are deeply intertwined in a Mind-Body-Psyche system (individual or collective). Finally, any theory, dogma, or knowledge-system, while appearing to have a mental-only reality, in fact implies specific values (the underlying paradigm), as well as specific behaviors, feelings, and relational styles. This is how, for example, adhering to a seemingly 'reasonable' discourse may lead to unknowingly adhere to, and perform or act out behaviors one would never have endorsed consciously.

# 3. Hate-Violence Logfield

Let us now see how the *Logical Fields Model* may shed some light on ethno-political interactions, namely the spiral of hate-violence. Any political analyst knows that using aggression and violence in a conflict can only bring more hate and violence in return, ad infinitum, in a mounting spiral of aggression. What is surprising, then, is the total blindness of both fighting sides to this simple fact, and how each insists on being *the sole* victim of aggression, while it memorizes only its *own* losses and damages. After doing so, it feels obligated, and '*rightly so*', to '*retaliate*'. The Hate-Violence Logfield, being quasi similar in the two opponents, creates the sadly well-known 'deadlock' of ethnic hate.

ENNEMY X: Values: Ethnic identity, religious identity, land ownership (usual healthy values for a country); however, here, these values are thought in opposition to the 'enemy'.

Affect: Feeling threatened and being on the defensive  $\Rightarrow$  engenders fear  $\Rightarrow$  leads to imagine worse-case scenarios of enemy's actions.

Pressure  $\Rightarrow$  leads to believing these worse-case scenarios.

Actions/behaviors: Believing worse-case scenarios  $\Rightarrow$  leads to 'defensive measures' (as if responding to, or averting the scenarios) and  $\Rightarrow$  imposing losses and damages to the enemy.

FACTS: many wounded and dead.

ENNEMY Y: In the enemy camp (after the felt 'aggression'):

Affect: horror, shock, and grief. Amplification of grief through the medias.

Grief  $\Rightarrow$  triggers anger  $\Rightarrow$  triggers rage  $\Rightarrow$  leads to wishing and projecting retaliation.

Actions/behaviors: Planning retaliation  $\Rightarrow$  retaliation.

FACTS: many wounded and dead.

ENNEMY X: In the enemy camp (after the felt 'aggression'): Affect: horror, shock, grief ...

- The population on each side is fed information nearly exclusively at the 'affect' level (and using the worst possible images) – so as to impact with enormous force on the psyche of people, thus fueling more hate and building up support toward the 'necessary retaliation'.
- The level of affect turmoil in everybody (including army, police, militants) is such that all thinking and discussions are mostly restricted to this level and to angry-desperate or else angry-punitive forms of 'retaliation'.

At the thinking level, any event is processed through the logfield, i.e. through basic axioms (The enemy IS the aggressor, cruel, projecting our end as a people, etc.). As we have said, the logfields of both opponents are nearly similar (even if the means of 'retaliation' and aggression differ): there is only one Hate-Violence Logfield, mirrored in the two sides. The basic constitutive values of a people (or a sub-culture), the fundamental rights of a country (such as ethnic and religious identity, and land ownership) are progressively denied to the 'enemy' deemed less than human. Soon, only the negative Affect-Violence cluster remains. In a grassroot, spontaneous uprising of a people striving to be granted basic human rights, the purpose will never be lost, rendering high-level political manipulation useless; only finding a long-term settlement – that grants them these basic human rights and social justice – will do.

## Events' interpretation within a logfield

A useful feature of the Logical Fields Model is the way it may highlight the interpretation of events within a given logfield. The logfield of each side is a self-contained, encysted, interpretation-engine, in which the enemy's acts and all events touching on the issue - whatever they are – are not only systematically understood through the biases of the logfield, but more to the point, are all forecasted and pre-interpreted. EX predicts EY will do action N for such and such reason, thus when event N do occur, the interpretation is already at hand, even if the said event needed, for its occurring, a specific prior action M enacted by EX (who made the prediction). This seminal action M precipitating the event will be totally blacked out from EX's reports on the current events, while in contrast, EY will report having 'retaliated' to the enemy's horrendous act M. This is reminiscent of the 'self-fulfilling prophecy' phenomenon; however the present framework may help us analyze it in more depth.

Semantic Fields Theory poses that events are brought about by a slow-building semantic constellation of forces consisting not only of the usual hard constraints (physical, economical, biological, etc.) but of semantic and psychic forces as well - whether collective or personal (Hardy, 1998, 2003). In such a perspective, the attribution of worse intentions to the other side is in itself a semantic force contributing in reality to the in-forming of more dire events. As the two sides engage in a similar attribution of worse intentions, it raises the sheer intensity of the mistrust between them, consequently empowering their radical wings and further cementing the deadlock.

#### **Deadlock situation**

A deadlock conflict between two countries (or ethnies) has devastating consequences on both of their populations, such as: highly negative affects (exacerbated hate, anger, fears, anguish) and losing sight of positively balanced values (such as human rights for all, or any country's or ethnie's rights). Its effect on the civil population, especially the youth, is devastating: the loss of humanistic values together with negative affects plus a growing sense of helplessness, all this creates a feeling of desperation, of meaninglessness, of being robbed of one's own future, of being expendable, one's life being useless, etc.). It creates a mix of vengefulness and acute helplessness, a condition psychologically extremely dangerous and bordering on the pathological. One of its most appalling consequences is the seeding of hate-violence in a new generation, rendering the possibility of normalization and the befriending between the two people even more remote in time.

# 4. How to Disentangle a Deadlock Situation

Concerning the logfield's organization, given that Affect is both the fuel of violence and the main target of manipulation, the soundest way to de-escalation, détente, and normalization is to shift the weight out of Affect and back into Values. Purpose-driven rebellious or terrorist acts, if it is what they are, must definitely get to a stop when the core goal (in Value) is achieved. (Of course, in practice, it has to be clearly expected and accepted, that the heat of hatred will keep producing dramatic acts of violence for some time afterwards, but they should nevertheless show a clear decline.) The overall purpose (or goal) is in the mind dimension, something that can be discussed, bargained for, trade off; something lending itself to rational talks, collective discussion, and brainstorming toward a bipartisan solution.

The African art of palabre teaches us that a small group of wise, authoritative and above-theconflict coordinators – in our ethnic conflict case, at the regional and international level – has the ability and the power to command a reasonable settlement and to make it happen. It will then be the task of responsible governments in the two countries/ethnies to reinstall a value-oriented focus in all political and public debates, which would then be naturally reflected in the media 'coverage'. Political manipulation, if pursued, will then stick out of the background by its attempts at wrecking the normalization by lingering on Affect and opponent's demonization. This is why peace-talks at the political level have to be pursued at all costs whatever the situation on the terrain, and if dodged by one or both sides, a settlement reached within the UN, or backed-up by the UN, has to be imposed, because achieving a political settlement is the only means of ending the conflict. It seems obvious then that the only way out of the spiraling violence is to install a neutral, UN-type, peacekeeping force that will single out the perpetrators of violence and confront them with the new law and worldview (the new logfield of peaceful cohabitation and cooperation).

# The quickest solution to a deadlocked conflict is a leap to a more global level, to a metalogfield

How can a deadlock situation be disentangled, whatever the kind of logfield implied? One would be wise to say that a thorough systemic reorganization has to occur... but how? Given the encysted interlocked logfields (which can only lead to more tension and more hate-violence), it appears the deadlock can only be broken by creating a conceptual model and organization at a higher, more encompassing level: in brief, by creating a meta-logfield. As Peter Checkland advises: "Lift the thinking [out of] models which map existing structures," (1999, p.A22). In other words, this *meta-logfield* should stand above, and circumvent, the paradigmatic assumptions of the two contending logfields.

This meta-logic was absolutely necessary in science, and provided for example a royal exit out of the gridlock of the light-as-particles versus light-as-waves schools of thought; Louis de Broglie leapt to a higher logic: Not only photons, but all particles, were both waves and particles; the meta-logfield was that all particles had associated waves. Furthermore, the higher-level logic proved the two schools to be correct (something their equally successful yet competing experiments over the decades of the conflict had already shown).

Similarly, a conflict at the state level can be resolved by organizations at the federal level, and conflicts that are ethno-religious or between countries should be resolved at the Global Earth, systemic, level, by international organizations representing the will of all nations in a kind of meta-level cooperative and conversational network, based on exchanges and the democratic participation of all members. Yet, let me also point that to deny to a weak-end of a conflict the participation as a full member to these global organizations – thus denying them the right to be uplifted out of the conflict in a just, supportive, and comprehensive way – displays an appalling cruelty toward this community, and it reveals only a grave lack of insight and sense of justice from the part of the superpowers.

Let's now take the perspective of our actual zeitgeist, which has been uplifted by the Black Lives Matter movement in 2020 in the US and the world (Hardy, 2020). Our collective intelligence has suddenly made a leap and developed an acute awareness of, and empathy vis-à-vis, any social injustice – especially racist, gender-based, ethnic and community-based – and it steered us to nurture a focused and shared goal of atoning for, and redressing these injustices, right now, as we become intensely aware of them.

We are now a different people, citizens of Earth, experiencing a shared consciousness of how our governance systems (at all levels) impact on the people, communities, and the planet itself; and there is no going back to accepting any tone-deaf and self-interested plutocracy or autocracy. And with this new zeitgeist, we shall assume that ethno-religious conflicts, generally triggered and intentionally sustained by autocrats, are not only severely outdated and obsolete, but exceedingly counter-productive, since they do not respect human rights and cultural differences and are contrary to achieving a multi-ethnic, multi-racial, mosaic in the world, respectful of the planet and of our shared life-sustaining resources.

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# 5. Democracy & Accountability

Democracy, says Linda Dennard (1997) is a process still in evolution that "exists in the dynamics of society itself as it adjusts to accommodate difference". Thus the essence of democracy does not lie in the voting procedure per se, nor in the representative system – all too often flawed themselves. Rather it lies in the dialogue about governance and in the political options allowed by a multiparty organization. It points to the possibility of achieving a constructive debate and multi-partisan governance, that is, a cooperative network striving to represent the will of all the people (in the way Holland allocates TV time to all political parties, as a direct percentage of their number of adherents).

In this respect, democracy is about accountability, and breaking a linear, quasi-dictatorial, chain of command. It is about an administration being accountable vis-à-vis not only its own laws and Constitution, but also international law and human rights – the latter standing above any government, even an elected one.

## **Classical Military Logfield**

Let us analyze in this light the outmoded Classical Military Logfield. Its values are a strict hierarchical chain of command, unquestioned, and harshly imposed. Behaviors: the top brass issues orders to which lower-rank officers can only obey. Actions: unaccountable violence and inflicting inefficient, heavy, casualties, without so much as sparing the civilian population. Affect: loyalty to one's own country, fear of disobeying. The Vietnam War has shown the horrendous perverse effects of this logfield. Officers are now considered accountable for their actions in regard to international law and human rights violations. This accountability notion runs contrary to both the blunt use of power by the top brass, and the blind following of orders by lower rank soldiers. The result of this value shift is exemplified by the creation of the International Criminal Court (ICC), standing above governments and leaders too much inclined to seize dictatorial power, even in democracies.

## **Emerging Military Logfield**

Let us now analyze the *Emerging Military Logfield*. Its *values*, in a true democratic vision, are: accountability at all levels, respect of international law and human rights, protection of all civilian populations, minimum casualties. Affect: humanitarian vision, cooperation, and responsibility. Behaviors: peace-serving behaviors, respectful of environment; use of force strictly limited to law-enforcement.

Let's keep in mind that, just as democracy, this *Emerging Military Logfield* is an ongoing evolutionary process as well. Thinking within this logfield leads to interesting new insights:

First, our current preeminent and guiding worldview is now to attribute to (1) being human, and (2) on planet Earth, a higher value than one's own sense of belonging, or appartenance, to a country, race, religion, party or clan. That means putting the respect of human life and the viability of natural systems above particular interests – whether the latter are those of an interest group or a superpower. The congruent value is to give priority to international law and human rights, and solving the climate emergency, over any sub-system laws.

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A second insight (and it is quite sad that it needs advocating) is to give added value to the coming generations, especially in terms of avoiding war-inflicted traumas, *whether* in the aggressor or the victim role – both roles being damaging to the psyche – and that calls for waractions to become peace-keeping actions and to be solely a profession and not a patriotic duty. (This becomes self-evident when the military endorses a peace-keeping, and planet-saving, cooperative mission.).

## 6. Conclusion

Clearly, it is essential for all nations to give proper decisive power and responsibility to international organizations representing the will of all nations in a kind of *meta-level democracy*. The unavoidability of globalization (as planetary systems become more and more intertwined) should not lead us to assume that it is bound to be a homogenous order enforced by some superpowers, and the playground of special interests groups and lobbies. We should instead strive for envisioning and in-forming several multinational organizations endowed with specific tasks. And lastly, the decisive paradigm shift is to be able to raise our concern about a viable future toward creating a humanistic and multi-cultural world-society, welcoming difference, divergence, and sub-cultures' richness.

The democratic vision takes us more and more to creating a shared consciousness that becomes an active and generative collective intelligence, and to the launching of a planetary cooperation for the well-being of the variegated peoples of Earth and the planet. Let us soar with it.

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