

3rd iteration (scroll down for previous drafts)

2019 July 11th - Chris B. DRAFT Unverified – AALEs vs Agency Law
Support-mémo following June 24th and prior to July 15th Live Session for
Autonomous and Automated Legal Entities Hack - HackMD
MIT Media Lab Computational Law with Dazza, Brenden, Beth et al.

Preparation for our July 15th Live session-

This 3rd iteration deals with DAO/Actor permutations for all three HackMD Scenarios 1, 2 & 3 via three Tables 1, 2 & 3.

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Scenarios permutation tables: what the “tables” tool does in below 3rd iteration, is to allocate functions to roles, and play out scenarios from the perspective of each role. Such a tool may be easily tweaked and applied to many situations.

Table 1 running 3 DAO/Actor permutations for Scenario 1 – Actor meaning Principal, Agent, Third Party

--1A--	--1B-- Common Facts &/or Frameworks toward AALE specifically	--1C-- Scenario 1 before permuting DAO among actors	--1D-- Scenario 1 with Principal as DAO (DAO-Princ.)	--1E-- Scenario 1 with Agent as DAO (DAO-Agent)	--1F-- Scenario 1 with Third Party as DAO (DAO-TP)
-1- Scenarios descriptions	Principal engages agent to find and purchase a rare book. --- Agent finds book seller and makes an offer --- The seller now becomes the third party.	Third party accepts payment plan proposed by Agent --- Third party delivers book to agent and no money changes hands --- Agent delivers book to principal --- Principal fails to pay after first installment because she claims agent had no authority to bind her to a payment plan.	<i>It is fair to assume that payment plan is made clear via smart contract - SC- without ambiguity, managed by DAO-Principal. Does it mean 3rd party accepted a wrong payment plan, not aligned on SC?</i>	It is fair to assume that payment plan is made clear via smart contract -SC- without ambiguity, managed by DAO-Agent. Does it mean DAO-Agent didn't properly coordinate with Principal the payment terms as encoded in SC?	<i>It is fair to assume that payment plan is made clear via smart contract - SC- without ambiguity, managed by DAO-TP. Does it mean Agent didn't properly coordinate with Principal for the payment terms as encoded in SC?</i>
-2- Rights and responsibilities of Principal to Agent	Principal hires Agent, define and structure Agent's mission objectives, methods, procedures + Agency Law add-on	If the agent is acting in the scope of its authority from the third party perspective (i.e. apparent/ostensible authority) but if the agent went outside scope of actual authority then the principal may have a claim against the agent, for example, for the money obligation above the set amount that the agent agreed to pay.	<i>DAO-Principal needs to make sure the Agent gets smart contract terms & payment plan right prior to dealing with any potential 3rd Party.</i>	DAO-Agent would have gone out of scope of actual authority if SC payment terms are not aligned with conditions set by Principal. Can we say, if Principal mandates a DAO-Agent, then Principal "should have known better" what that entailed technically with protocols and SC ???	<i>Agent would have gone out of scope of actual authority if DAO-TP SC payment terms were not aligned with conditions set by Principal. Can we say, if Principal allows Agent to deal with DAO-TP, then Principal "should have known better" what that entailed technically with protocols and SC ???</i>
-3- Rights and responsibilities of	Principal delivers its end of the deal, retributes accordingly the 3 rd party directly or via Agent +		<i>DAO-Principal needs to make sure that potential 3rd Parties are in a position to understand smart contract terms &</i>	If Principal mandates DAO-Agent then Principal "should know" what that entails technically with protocols and SC, but also	<i>If Principal mandates Agent to accept DAO-TP, then Principal "should know" what that SC entail technically, and make sure</i>

Principal to 3rd Party	mutual understanding etc + Agency Law adds-on.		<i>payment plan prior to dealing with agent.</i>	the consequences for 3 rd Party literacy need in SC.	<i>of both Principal & Agent required literacy in SC.</i>
-4- Rights and responsibilities of Agent to Principal	Agent executes mission objectives, methods, procedures, secures mutual understanding between 3 rd Party & Principal + Agency Law add-on with duty of care, fiduciary duty, etc.	If principal was "undisclosed" the agent may (would?) also be liable for the obligation.	<i>Agent executing mission for DAO-Principal needs to make sure he doesn't screw up the process involving smart contract when dealing with 3rd party's understanding & execution.</i>	DAO-Agent using SC to transact needs to make sure Principal & 3 rd Party are all on the same page. Scope of Authority issues + duty of care to verify mutual understanding.	<i>If Principal mandates Agent to accept DAO-TP, then Agent should make sure together with Principal of their required literacy in SC – duty of care & fiduciary duty.</i>
-5- Rights and responsibilities of Agent to Third Party	Agent transact with 3 rd Party on behalf of Principal, with actual / apparent authority, in ways that are duly represent Principal. + Agency Law adds-on.		<i>Agent executing mission needs to make sure of the 3rd party's understanding of the execution process involving smart contracts</i>	DAO-Agent using SC to transact needs to make sure Principal & 3 rd Party are all on the same page, that 3 rd Party is SC literate.	<i>Agent transacting with DAO-TP using SC need to verify that DAO-TP SC deal & payment terms are aligned with Principal's required terms.</i>
-6- Rights and responsibilities of Third Party to Principal	3rd Party deliver its end of the deal, get retributed accordingly by Principal directly or via Agent + mutual understanding + Agency Law adds-on.	The third party can't "double dip" and get contract amount from BOTH the agent and principal	<i>3rd Party engaging with DAO-Principal needs to be literate in dealing with smart contract related procedures – not understanding what one deals with is no excuse.</i>	3 rd Party engaging with Principal needs to be literate in SC related procedures since DAO-Agent is involved – not understanding what one deals with is no excuse.	<i>DAO-TP engaging with Principal needs to verify Principal literacy in SC related procedures, in case Agent is too lazy - not understanding what one deals with is no excuse.</i>
-7- Rights and responsibilities of Third Party to Agent	3rd Party deliver its end of the deal, get retributed accordingly by Principal directly or via Agent + mutual understanding + Agency Law adds-on.	The third party can't "double dip" and get contract amount from BOTH the agent and principal	<i>3rd Party engaging with Agent who acts on behalf of DAO-Principal needs to honestly confirm her literacy in dealing with smart contract related procedures – not understanding what one deals with is no excuse.</i>	In case the 3 rd Party tries to “double dip”, 3 rd Party should understand that DAO-Agent won't let this happen by virtue of SC, locking out that risk.	<i>In case DAO-TP tries to “double dip” by crafting double SC payment behind Principal's back, DAO-TP should understand that if Principal & Agent have good communication, they may find out and claim.</i>

--1A--	--1B-- Common Facts &/or Frameworks toward AALE specifically	--1C-- Scenario 1 before permuting DAO among actors	--1D-- Scenario 1 with Principal as DAO (DAO-Princ.)	--1E-- Scenario 1 with Agent as DAO (DAO-Agent)	--1F-- Scenario 1 with Third Party as DAO (DAO-TP)
-8- “Manifestation of assent to another person” and “Manifestation of assent or other-wise consents so to act”	AALE conduct that warrants sufficient CL Manifestations i.e. other than understood as “de facto action by a human that is necessary & sufficient to indicate consent”.	Required human manifestations were provided between Principal & Agent only for sourcing the book --- Principal allows herself to claim the Agent bound her to an unapproved payment scheme	<i>With DAO-Principal, “Manifestation of assent” is materialized by compliance with SC terms that trigger deal execution & payment, also locking out Agent from dealing outside the scope of SC terms?</i>	With DAO-Agent, “Manifestation of assent” is materialized by compliance with SC terms that trigger deal execution & payment, also locking out DAO-Agent from dealing outside the scope of SC terms?	<i>With DAO-TP, “Manifestation of assent” is materialized by compliance with SC terms that trigger deal execution & payment, precluding Agent from dealing outside the scope of SC terms, and Principal from claiming disagreement on terms?</i>
-9- Parties' Labeling and Popular Usage Not Controlling	AALE contract processes part and parcel of “industry or popular usage”	No particular comment yet	<i>When will DAOs SC processes be part and parcel of “industry or popular usage” ???</i>	When will DAOs SC processes be part and parcel of “industry or popular usage” ???	<i>When will DAO SC processes be part and parcel of “industry or popular usage” ???</i>
-10- Disclosed, undisclosed, and unidentified principals	These variants remain relevant for AALE actors.	To explore variants at DAO stage	<i>Undisclosed / disclosed DAO-Principal doesn't change the fact that smart contract “reveals” it's a DAO anyway.</i>	Undisclosed / disclosed Principal doesn't change the fact that DAO-Agent SC disclose that Principal is involved anyway?	<i>Undisclosed / disclosed Principal doesn't change the fact that DAO-TP SC disclose that Principal is involved anyway?</i>
-11- Special case of Disclosed but unidentified principals	Could be AALE common situation: ano/pseudonymous - ring signatures warrant caution	To explore Disclosed but Unidentified Principal at DAO permutation stage	<i>Business can still be done but who really is responsible if DAO-Principal uses ano- / pseudo-nymous, ring signatures, etc.</i>	Business can still be done provided DAO-Agent authorizes Principal to use ano- / pseudo-nymous, ring signatures, etc., then who is responsible, etc.?	Business can still be done provided DAO-TP authorizes Principal to use ano- / pseudo-nymous, ring signatures, etc., then who is responsible, etc.?
-12- Notice & Proof of Agreement:	Understanding parties mutually agree on a given "state" of affairs in an AALE context	Agreement on payment scheme was missing	<i>Correct use of the DAO-Principal smart contract by Agent & 3rd Party warrants there exists</i>	Correct use of the DAO-Agent SC by Principal & 3 rd Party warrants there exists mutual	<i>Correct use of DAO-TP SC by Principal + Agent duty of care + fiduciary duty warrant there exists</i>

			<i>mutual understanding & agreement on terms.</i>	understanding & agreement on terms.	<i>mutual understanding & agreement on terms.</i>
-13- Actual Authority vs Apparent Authority	Define for AALE: “manifestation”, “belief”, cognitive, communication, validation & state confirmation processes.		<i>If DAO-Principal confers Authority to Agent via smart contract, then there is no ambiguity about it, if verified with 3rd Party in neat terms.</i>	If Principal confers Authority to DAO-Agent via smart contract, then there is no ambiguity about it, if verified with 3 rd Party in neat terms.	<i>DAO-TP using SC that involves Principal may force Agent to clarify & Principal to streamline issues of Actual vs Apparent Authority.</i>
-14- Estoppel to deny existence of Agency relationship	Liability to Principal AALE or when abusive Agent is AALE	Principal not going as far as denying Agency relationship	<i>Isn't it hard to deny an Agency relationship with DAO-Principal if it is based on smart contract?</i>	Isn't it hard to deny a DAO-Agency relationship with Principal if it is based on smart contract?	<i>If DAO-TP encoded SC involves Agent in addition to Principal, it's hard to deny Agency relationship.</i>

--1A--	--1B-- Common Facts &/or Frameworks toward AALE specifically	--1C-- Scenario 1 before permuting DAO among actors	--1D-- Scenario 1 with Principal as DAO (DAO-Princ.)	--1E-- Scenario 1 with Agent as DAO (DAO-Agent)	--1F-- Scenario 1 with Third Party as DAO (DAO-TP)
-15- Liability of Undisclosed Principal	If Agent is AALE , Undisclosed Principal must do due diligence		<i>DAO-Principal should set aside enough crypto for payment, prior to smart contract dealings.</i>	Undisclosed Principal need to do due diligence on DAO-Agent to figure out whether the use of SC doesn't result in P's de facto Disclosure?	<i>Undisclosed Principal need to do due diligence on DAO-TP to figure out whether the use of SC doesn't result in P's de facto Disclosure?</i>
-16- Capacity to Act as Principal or as Agent	Definition of capacities for AALE	No issue of capacity in human scenario	<i>Definition of capacities for Principal-DAO in terms of Agency Law?</i>	Definition of capacities for DAO-Agent in terms of Agency Law?	<i>Capacity to Act as Principal or as Agent must include SC literacy for dealing with DAO-TP.</i>
-17- Imputation of Notice of Fact to Principal	Define “Imputation of Notice of Fact” process for AALE	No particular comment	<i>Define smart contract: “Imputation of Notice of Fact” process toward DAO-Principal</i>	Define smart contract: “Imputation of Notice of Fact” process by DAO-Agent toward Principal	<i>Define smart contract: “Imputation of Notice of Fact” process by DAO-TP toward Principal.</i>

-18- Agent who acts adversely to a Principal	Adversarial AALE: deliberate, bugged or hacked	Agent not adversarial	<i>Agent not adversarial in this case.</i>	Agent not adversarial in this case.	<i>Agent not adversarial in this case.</i>
-19- Fraud	AALE gone rogue	No Fraud by Agent – Principal’s attitude may not count as fraud.	<i>Not a fraud situation</i>	Not a fraud situation	<i>Not a fraud situation</i>
-20- Fiduciary Duty	AALE to be engineered for that	Agent should have first confirmed payment scheme with Principal.	<i>Agent should be tech – equipped to verify payment scheme via DAO-Principal SC.</i>	Principal should be tech – equipped to verify payment scheme via DAO-Agent SC.	Principal & Agent should be tech – equipped to verify payment scheme via DAO-TP SC.
-21- Incorrect Belief	AALE cognition	Incorrect Belief payment scheme was agreed	<i>No need for “belief” if deal & payment terms are verified by SC.</i>	No need for “belief” if deal & payment terms are verified by SC.	<i>No need for “belief” if deal & payment terms are verified by SC.</i>

--1A--	--1B-- Common Facts &/or Frameworks toward AALE specifically	--1C-- Scenario 1 before permuting DAO among actors	--1D-- Scenario 1 with Principal as DAO (DAO-Princ.)	--1E-- Scenario 1 with Agent as DAO (DAO-Agent)	--1F-- Scenario 1 with Third Party as DAO (DAO-TP)
-22- Presumed Due Diligence	AALE cognition		<i>Administrators of DAO-Principal need to make sure to hire only</i>	Administrators of DAO-Agent need make sure to deal with Principal whom	<i>Administrators of DAO-TP need make sure to deal with Principal & Agent</i>
-23- Duty of Care	AALE cognition		<i>Agent(s) that can deal with DAO, SC, etc.</i>	can handle DAO+SC and has responsibly assessed it.	<i>whom can handle SC and responsibly assessed it.</i>
-24- Agent Absconds with something	AALE gone rogue		<i>Not the case here.</i>	Not the case here.	<i>Not the case here.</i>
-25- Not in Scope of Authority	AALE gone rogue	If the agent is acting in the scope of its authority from the third party perspective (i.e. apparent/ostensible authority) but if the agent went	<i>← remark on the left applies. If Agent dealt with 3rd Party on the basis of terms outside</i>	There could be issues of DAO-Agent gone “rogue” either deliberately (admin) or by bad engineering	<i>Administrators of DAO-TP need to engineer SC in a way that mitigate or even eliminate risks of Not in</i>

		outside scope of actual authority then the principal may have a claim against the agent, for example, for the money obligation above the set amount that the agent agreed to pay.	<i>terms defined in DAO-Principal's SC, then Agent is out of Scope of Authority. Better safe than sorry if such Authority of Agent is also encoded via SC.</i>	(bug) or having got hacked (issues of liabilities & insurance), that would result in DAO-Agent not in scope of Authority. Not sure how background circumstances would affect Principal claim.	<i>Scope of Authority events, by encoding Agent right Scope of Authority???</i>
-26- Failure to recognize poor Intent	AALE cognition	Poor intent by Principal	<i>"Poor Intent" doesn't apply if all is set in SC</i>	"Poor Intent" doesn't apply if all is set in SC (???).	<i>"Poor Intent" doesn't apply if all is set in SC???</i>
-27- More Estoppel		?	?	?	?
-28- Settlement with Agent by Principal or Third Party	AALE settlement mechanism	---	<i>Settlement mechanism at DAO-Principal level only via SC means damage control at that level only. Streamline?</i>	Settlement mechanism at DAO-Agent level only via SC means damage control at that level only. Streamline?	<i>Settlement mechanism at DAO-TP level only via SC means damage control at that level only. Streamline?</i>

--1A--	--1B-- Common Facts &/or Frameworks toward AALE specifically	--1C-- Scenario 1 before permuting DAO among actors	--1D-- Scenario 1 with Principal as DAO (DAO-Princ.)	--1E-- Scenario 1 with Agent as DAO (DAO-Agent)	--1F-- Scenario 1 with Third Party as DAO (DAO-TP)
-29- Agent's Implied Warranty of Authority & Representations	Case of AALE gone "rogue", deliberately, or by poor engineering, or just got hacked		<i>See above on Authority if DAO-Principal seals Agent Authority via SC.</i>	See above on Authority if Principal seals DAO-Agent Authority via SC.	<i>See above on Authority if DAO-TP seals Agent Authority vis-à-vis Principal via SC.</i>
-30- Point of Failure of	AALE: technical cause, deliberate, bugged, hacked.	Taken also in the meaning of technical point of failure, in	<i>←See remark on the left. Doesn't apply here since book was duly</i>	←See remark on the left. Doesn't apply here since book was duly transferred	<i>←See remark on the left. Doesn't apply here since</i>

Transfer / Object not Transferred		addition to deliberate fraud or negligence by actor.	<i>transferred by Agent to DAO-Principal.</i>	by DAO-Agent to Principal.	<i>book was duly transferred by Agent to Principal.</i>
-31- Information Corrupted	Idem as above	Idem as above	<i>Can SC payment terms be corrupted / hacked?</i>	Can SC payment terms be corrupted / hacked?	<i>Can SC payment terms be corrupted / hacked?</i>
-32- Binding to Kind of Law	---	---	<i>Other Laws that apply, such as Contract Law, Supply Chain integrity.</i>	Other Laws that apply, such as Contract Law, Supply Chain integrity.	<i>Other Laws that apply, such as Contract Law, Supply Chain integrity.</i>
-33- Techno-legal structure of a contract	---	---	<i>SC vs human readable contract (Ricardian...)</i>	SC vs human readable contract (Ricardian...)	<i>SC vs human readable contract (Ricardian...)</i>
-34- Scope of Employment & Hierarchies	---	---	---	---	---
-35- Future of Work	---	---	---	---	---

Table 2 running 3 DAO/Actor permutations for Scenario 2 – Actor meaning Principal, Agent, Third Party

--2A--	--2B-- Common Facts &/or Frameworks toward AALE specifically	--2C-- Scenario 2 before permuting DAO among actors	--2D-- Scenario 2 with Principal as DAO (DAO-Princ.)	--2E-- Scenario 2 with Agent as DAO (DAO-Agent)	--2F-- Scenario 2 with Third Party as DAO (DAO-TP)
-1- Scenarios descriptions	Principal engages agent to find and purchase a rare book. --- Agent finds book seller and makes an offer --- The seller now becomes the third party.	Same-ish as Scenario 1, but third party takes money yet never delivers book to agent	<i>That DAO-Principal is a DAO doesn't change the intrinsic & legal nature of 3rd Party's conduct (SC to trigger payment only once book verified?)</i>	If payment made via DAO-Agent managed SC, this happened since SC had no system to only trigger payment once book proper transfer is verified.	<i>Fair to assume DAO-TP fraudulently or negligently engineered SC in order to defraud Principal/ Agent: by not making payment trigger conditional to verified book transfer.</i>
-2- Rights and responsibilities of Principal to Agent	Principal hires Agent, define and structure Agent's mission objectives, methods, procedures + Agency Law add-on	Section 7 of the restatement of agency speaks to what needs to happen in specific vignettes when relations break down between parties.	← same as remark on the next column left. <i>Section 7 of the restatement etc.</i>	Can we say, if Principal mandates a DAO-Agent, then Principal "should have known better" what that entailed technically with poorly structured SC that triggers payment with unverified book transfer ??	<i>Can we say, if Principal allows Agent to deal with DAO-TP, then Principal "should have known better" what risk flawed SC entailed? Principal is entitled to proper duty of care by Agent, failed here.</i>
-3- Rights and responsibilities of Principal to 3rd Party	Principal delivers its end of the deal, retributes accordingly the 3 rd party directly or via Agent + mutual understanding etc + Agency Law adds-on.	Idem as above -	<i>Idem as above – left</i>	Principal maintain the right of recovering his book from 3 rd Party regardless of the SC vulnerabilities that resulted in DAO-Agent's failure – weak SC Principal "should know".	<i>Principal maintain right of recovering their book from DAO-TP regardless of fraudulent or negligent DAO-TP SC flaws, resulting in Agent's failure to get book to Principal.</i>

-4- Rights and responsibilities of Agent to Principal	Agent executes mission objectives, methods, procedures, secures mutual understanding between 3 rd Party & Principal + Agency Law add-on with duty of care, fiduciary duty, etc.	Idem as above + Agent may have breached duty of care to principal by doing insufficient due diligence into seller or structuring transaction poorly (i.e., giving money w/o getting book at same time).	← same as remark on the next column left + since Agent didn't get book, it shows flaws in DAO-Principal SC with Agent (& 3 rd Party) that triggered payment with book still unverified.	← same as left remark + DAO-Agent needs make sure SC robust enough to warrant secure transaction. Duty of care to verify SC & mutual robustness.	<i>If Principal mandates Agent to accept DAO-TP, then Agent should assess with Principal risks related to DAO-TP SC literacy & fraud or negligence – duty of care & fiduciary duty.</i>
-5- Rights and responsibilities of Agent to Third Party	Agent transact with 3 rd Party on behalf of Principal, with actual / apparent authority, in ways that are duly represent Principal. + Agency Law adds-on.	Idem as above -	<i>Idem as above – left</i>	DAO-Agent needs make sure SC robust enough to warrant secure transaction, that 3 rd Party is SC literate and deterred from abusing any such SC vulnerability.	<i>Agent transacting with DAO-TP SC need verify deal/ payment terms are secured for Principal, trigger conditional to verified book transfer.</i>
-6- Rights and responsibilities of Third Party to Principal	3rd Party deliver its end of the deal, get retributed accordingly by Principal directly or via Agent + mutual understanding + Agency Law adds-on.	Idem as above + Third Party Seller could also be liable to principal and/or agent under tort of conversion.	← same as remark on the next column left.	Under tort of conversion, 3 rd Party is liable vis-à-vis Principal to get book delivered via DAO-Agent even if that idiot structured the transaction poorly with weakly engineered SC.	<i>DAO-TP engaging with Principal needs to verify Principal SC literacy, in case Agent is too lazy - not understanding what one deals with is an invitation to abuse such weakness.</i>
-7- Rights and responsibilities of Third Party to Agent	3rd Party deliver its end of the deal, get retributed accordingly by Principal directly or via Agent + mutual understanding + Agency Law adds-on.	Idem + Third Party Seller could also be liable to principal and/or agent under tort of conversion --- Some arguments 3 rd party can make: perhaps Agent had no authority to accept book on behalf of Principal but they would (presumably) still have obligation to deliver book to Principal.	← same as remark on the next column left. If in their arguments, 3 rd Party emphasize that DAO-Principal is DAO, it doesn't change the fact they would (presumably) still have obligation to deliver book to DAO-Principal.	Some arguments 3 rd party can make: perhaps DAO-Agent had no authority to accept book on behalf of Principal but they would (presumably) still have obligation to deliver book to Principal.	<i>Under tort of conversion, DAO-TP is liable to Principal and/or Agent. DAO-TP saying “perhaps Agent had no authority to accept book on behalf of Principal” DAO-TP would (presumably) still have obligation to deliver book to Principal.</i>

--2A--	--2B-- Common Facts &/or Frameworks toward AALE specifically	--2C-- Scenario 2 before permuting DAO among actors	--2D-- Scenario 2 with Principal as DAO (DAO-Princ.)	--2E-- Scenario 2 with Agent as DAO (DAO-Agent)	--2F-- Scenario 2 with Third Party as DAO (DAO-TP)
-8- “Manifestation of assent to another person” and “Manifestation of assent or otherwise consents so to act”	AALE conduct that warrants sufficient CL Manifestations i.e. other than understood as “de facto action by a human that is necessary & sufficient to indicate consent”.	Required human manifestations were provided between Principal & Agent only for sourcing the book	<i>Disingenuous 3rd Party might argue about DAO-Principal’s deficiency in Manifestation of Assent.</i>	“Manifestation of assent” for DAO-Agent sealed by compliance with SC terms that trigger deal&payment, locking out DAO-Agent from dealing outside scope of SC terms – still, poorly structured SC remains.	<i>With disingenuous DAO-TP, “Manifestation of assent” is materialized by compliance with SC terms that trigger deal execution & payment, unless SC is conveniently flawed to allow fraud or negligence?</i>
-9- Parties' Labeling and Popular Usage Not Controlling	AALE contract processes part and parcel of “industry or popular usage”	No particular comment	<i>When will DAOs SC processes be part and parcel of “industry or popular usage” ???</i>	When will DAOs SC processes be part and parcel of “industry or popular usage” ???	<i>When will DAOs SC processes be part and parcel of “industry or popular usage” ???</i>
-10- Disclosed, undisclosed, and unidentified principals	These variants remain relevant for AALE actors.	To explore variants at DAO stage	<i>Undisclosed / disclosed DAO-Principal doesn’t change the fact that SC “reveals” it’s a DAO anyway.</i>	Undisclosed / disclosed Principal doesn’t change the fact that DAO-Agent SC disclose that Principal is involved anyway?	<i>Undisclosed / disclosed Principal doesn’t change the fact that DAO-TP SC disclose that Principal is involved anyway?</i>
-11- Special case of Disclosed but unidentified principals	Could be AALE common situation: ano/pseudonymous - ring signatures warrant caution	To explore Disclosed but Unidentified at DAO stage	<i>3rd Party is well aware it steals from Disclosed DAO-Principal even if Unidentified.</i>	Business can still be done provided DAO-Agent authorizes Principal to use ano- / pseudo-nymous, ring signatures, etc., then who is responsible, etc.?	Business can still be done provided DAO-TP authorizes Principal to use ano- / pseudo-nymous, ring signatures, etc., then who is responsible, etc.?
-12- Notice & Proof of Agreement:	Understanding parties mutually agree on a given "state" of affairs in an AALE context		<i>3rd Party in contempt of Notice & Proof of Agreement even if in SC with DAO-Principal.</i>	Use of DAO-Agent SC by Principal & 3 rd Party warrants there exists mutual understanding & agreement on terms, what if SC poorly structured?	<i>DAO-TP SC for Principal + Agent duty of care + fiduciary duty warrant mutual understanding & agreement, but doesn’t preclude fraud/negligence.</i>

-13- Actual Authority vs Apparent Authority	Define for AALE: “manifestation”, “belief”, cognitive, communication, validation & state confirmation processes.	Some arguments third party can make: perhaps Agent had no authority to accept book on behalf of Principal but they would (presumably) still have an obligation to deliver the book to Principal.	← <i>same as remark on the next column left. If in their arguments, 3rd Party emphasize that DAO-Principal is DAO, it doesn't change the fact they would (presumably) still have obligation to deliver book to DAO-Principal.</i>	← same as remark on the 2 nd next column left. If Principal confers Authority to DAO-Agent via SC then there is no ambiguity about it, if verified with 3 rd Party in neat terms. If SC is poorly structured, 3 rd Party might argue Authority is moot, still obliged though.	<i>DAO-TP using SC that involves Principal may force Agent to clarify & Principal to streamline issues of Actual vs Apparent Authority.</i>
-14- Estoppel to deny existence of Agency relationship	Liability to Principal AALE or when abusive Agent is AALE	Principal not going as far as denying Agency relationship	<i>Principal not going as far as denying Agency relationship.</i>	Isn't it hard to deny a DAO-Agency relationship with Principal if SC based?	<i>If DAO-TP encoded SC involves Agent in addition to Principal, it's hard to deny Agency relationship.</i>

--2A--	--2B-- Common Facts &/or Frameworks toward AALE specifically	--2C-- Scenario 2 before permuting DAO among actors	--2D-- Scenario 2 with Principal as DAO (DAO-Princ.)	--2E-- Scenario 2 with Agent as DAO (DAO-Agent)	--2F-- Scenario 2 with Third Party as DAO (DAO-TP)
-15- Liability of Undisclosed Principal	If Agent is AALE , Undisclosed Principal must do due diligence		<i>Had DAO-Principal used SC that triggers payment only once book verified, it would have no liability (Undisclosed or not)</i>	Undisclosed Principal need to do due diligence on DAO-Agent to figure out whether the use of SC doesn't result in P's de facto Disclosure?	<i>Undisclosed Principal need to do due diligence on DAO-TP to figure out whether the use of SC doesn't result in P's de facto Disclosure?</i>
-16- Capacity to Act as Principal or as Agent	Definition of capacities for AALE under Agency Law (AL)	No issue of capacity in human scenario	<i>Definition of capacity for (AALE) DAO-Principal to act as Principal (AL).</i>	Definition of capacity for (AALE) DAO-Agent to act as Agent under AL.	<i>Capacity to Act as Principal or as Agent must include SC literacy for dealing with DAO-TP.</i>
-17- Imputation of Notice of Fact to Principal	Define “Imputation of Notice of Fact” process for AALE	No particular comment	<i>Define SC “Imputation of Notice of Fact” process for AALE DAO-Principal</i>	Define SC “Imputation of Notice of Fact” process for AALE DAO-Agent	<i>Define SC “Imputation of Notice of Fact” process for AALE DAO-TP.</i>

-18- Agent who acts adversely to a Principal	Adversarial AALE: deliberate, bugged or hacked	Agent is NOT adversarial	<i>In this case, Agent is NOT adversarial to DAO-Principal.</i>	In this case, DAO-Agent is NOT adversarial to Principal, just flawed.	<i>Agent NOT adversarial in this case.</i>
-19- Fraud	AALE gone rogue	Fraud by Third Party Seller	<i>Fraud by 3rd Party</i>	Fraud by 3rd Party	<i>Fraud by 3rd Party</i>
-20- Fiduciary Duty	AALE to be engineered for that	Agent is in breach of duty of care rather than of fiduciary duty: isn't Agent job to shield Principal from own flaws + weed out bad 3rd Parties?	<i>Agent is in breach of duty of care (rather than of fiduciary duty) for not shielding DAO-Principal from SC insufficiency & for not vetting 3rd Party.</i>	← same remark as on left column. DAO-Agent is in breach of duty of care for weakly structured SC + not weeding out bad 3 rd Party.	<i>Principal & Agent should be SC literate to verify payment scheme via DAO-TP SC and if triggers are conditional to goods (book) transfer verified.</i>
-21- Incorrect Belief	AALE cognition	Incorrect Belief in Third Party integrity	<i>I.B. in 3rd Party integrity triggers consequence of flawed SC execution.</i>	I.B. in 3rd Party integrity triggers consequence of flawed SC execution.	<i>I.B. in 3rd Party integrity triggers consequence of flawed SC execution.</i>

--2A--	--2B-- Common Facts &/or Frameworks toward AALE specifically	--2C-- Scenario 2 before permuting DAO among actors	--2D-- Scenario 2 with Principal as DAO (DAO-Princ.)	--2E-- Scenario 2 with Agent as DAO (DAO-Agent)	--2F-- Scenario 2 with Third Party as DAO (DAO-TP)
-22- Presumed Due Diligence	AALE cognition	Agent in breach of duty of care/failed to vet Third Party to avoid fraud.	<i>Agent failed to Due Dil. 3rd Party & to spot weak SC (unverified book).</i>	Administrators of DAO-Agent need make sure to deal with Principal whom	<i>Administrators of DAO-TP need make sure to deal with Principal & Agent</i>
-23- Duty of Care	AALE cognition	Agent may have breached duty of care to principal by doing insufficient due diligence into seller or structuring transaction poorly (i.e., giving money w/o getting book at same time).	←same remark as left & above. Most eye-opening cautionary tale is need for Agent to make sure DAO-Principal SC are properly structured!	can handle DAO+SC and has responsibly assessed it. Eye-opening cautionary tale is need for DAO-Agent to make sure SC has no flaws exploitable by unscrupulous 3 rd Party.	<i>whom can handle SC and responsibly assessed it. Eye-opening cautionary tale is need for DAO-TP to make sure SC has no flaws exploitable to nag DAO-TP fraudulent by design.</i>

-24- Agent Absconds with something	AALE gone rogue	Agent didn't abscond.	<i>Agent didn't abscond.</i>	Agent didn't abscond.	<i>Agent didn't abscond.</i>
-25- Not in Scope of Authority	AALE gone rogue	More like clumsy Agent failed to exercise proper Authority.	---	There could be issues of DAO-Agent gone "rogue" either deliberately (admin) or by bad engineering (bug) or having got hacked (issues of liabilities & insurance), that would result in DAO-Agent not in scope of Authority. Not sure how background circumstances would affect Principal claim.	<i>There could be issues of DAO-TP gone "rogue" either deliberately (admin) or by bad engineering (bug) or having got hacked by bad actors syphoning funds (issues of liabilities & insurance), that would result in DAO-TP money grab while not delivering the goods (book). Caution!</i>
-26- Failure to recognize poor Intent	AALE cognition	Poor intent by Third Party	<i>DAO-Principal & Agent failure (compounded by SC flaws) to Recognize Poor Intent by 3rd Party.</i>	Principal & DAO-Agent failure (compounded by SC flaws) to Recognize Poor Intent by 3 rd Party.	<i>Principal & Agent failure (compounded by SC flaws) to Recognize Poor Intent by DAO-TP.</i>
-27- More Estoppel		?	?	?	?
-28- Settlement with Agent by Principal or Third Party	AALE settlement mechanism	---	<i>If 3rd Party is forced to settle, should it deliver book to Agent or directly to DAO-Principal ???</i>	Settlement mechanism at DAO-Agent level only via SC means damage control at that level only, no way to get book. Fix SC first.	<i>Settlement mechanism at DAO-TP level only via SC means damage control at that level only, no way to get book. Fix SC first.</i>

--2A--	--2B-- Common Facts &/or Frameworks toward AALE specifically	--2C-- Scenario 2 before permuting DAO among actors	--2D-- Scenario 2 with Principal as DAO (DAO-Princ.)	--2E-- Scenario 2 with Agent as DAO (DAO-Agent)	--2F-- Scenario 2 with Third Party as DAO (DAO-TP)
-29- Agent's Implied Warranty of Authority & Representations	Case of AALE gone “rogue”, deliberately, or by poor engineering, or just got hacked	Agent's Implied Warranty of Authority & Representations = Agent’s IWoAR.	<i>Define to which extent DAO-Principal using SC with Agent, has impact on Agent’s IWoAR ???</i>	Define to which extent Principal using SC with DAO-Agent, has impact on Agent’s IWoAR ???	<i>See above on Authority if DAO-TP seals Agent Authority vis-à-vis Principal via SC.</i>
-30- Point of Failure of Transfer / Object not Transferred	AALE: technical cause, deliberate, bugged, hacked.	Taken also in the meaning of technical point of failure, in addition to deliberate fraud or negligence by actor.	<i>Deliberate fraud or negligence by 3rd Party. Poorly structured SC accounts as technical point of failure though.</i>	Deliberate fraud or negligence by 3 rd Party. DAO-Agent SC flawed engineering accounts as technical point of failure.	<i>Deliberate fraud or negligence by DAO-TP. SC flawed engineering (premeditated?) accounts as technical point of failure.</i>
-31- Information Corrupted	Idem as above	Idem as above	<i>No info corruption issue, just fraud by 3rd Party.</i>	No info corruption issue, just fraud by 3 rd Party.	<i>What if DAO-TP SC terms are corrupted / hacked?</i>
-32- Binding to Kind of Law	---	---	---	Other Laws that apply, such as Contract Law, Supply Chain integrity.	<i>Other Laws that apply, such as Contract Law, Supply Chain integrity.</i>
-33- Techno-legal structure of a contract	---	---	<i>Cautionary tale is need for Agent to make sure DAO-Principal SC are properly structured!</i>	Cautionary tale: need for DAO-Agent to make sure SC properly structured to trigger payment only once book transfer is verified.	<i>Cautionary tale: need for Agent to make sure DAO-TP SC properly structured with payment conditional to book transfer verified.</i>
-34- Scope of Employment & Hierarchies	---	---	---	---	---
-35- Future of Work	---	---	---	---	---

Table 3 running 3 DAO/Actor permutations for Scenario 3 – Actor meaning Principal, Agent, Third Party

--3A--	--3B-- Common Facts &/or Frameworks toward AALE specifically	--3C-- Scenario 3 before permuting DAO among actors	--3D-- Scenario 3 with Principal as DAO (DAO-Princ.)	--3E-- Scenario 3 with Agent as DAO (DAO-Agent)	--3F-- Scenario 3 with Third Party as DAO (DAO-TP)
-1- Scenarios descriptions	Principal engages agent to find and purchase a rare book. --- Agent finds book seller and makes an offer --- The seller now becomes the third party.	Same-ish as Scenario 1, but agent absconds with: Just book / Just money / Book and money	<i>That DAO-Principal is a DAO doesn't change the intrinsic & legal nature of fact Agent absconds with Just book / Just money / Book & Money</i>	DAO-Agent SC payment trigger conditional to book transfer verified prevents this. Thus DAO-Agent deliberately weakened SC to screw Princ. / 3 rd Party.	<i>Fair to assume DAO-TP amateurish SC engineering with no payment trigger conditional to verified book transfer, unwillingly facilitated Agent fraud.</i>
-2- Rights and responsibilities of Principal to Agent	Principal hires Agent, define and structure Agent's mission objectives, methods, procedures + Agency Law add-on	Section 7 of the restatement of agency speaks to what needs to happen in specific vignettes when relations break down between parties.	← same as remark on the next column left. <i>Section 7 of the restatement etc.</i>	Can we say, if Principal mandates a DAO-Agent, then Principal "should have known better" what that entails technically with poorly structured SC that triggers payment with unverified book transfer ??	<i>Can we say, if Principal allows Agent to deal with DAO-TP, then Principal "should have known better" what risk flawed SC entailed? Principal denied proper duty of care by Agent, then failed.</i>
-3- Rights and responsibilities of Principal to 3rd Party	Principal delivers its end of the deal, retributes accordingly the 3 rd party directly or via Agent + mutual understanding etc + Agency Law adds-on.	Is Principal liable to 3 rd Party seller for the \$ even though Agent stole book (and money)? Does it make a difference whether 3 rd Party seller knew Agent was acting Agent for Principal and relied on that in transacting? --- In the scenario where agent stole book but Third Party seller got the \$, does principal have a claim to get the \$ back? [Under English law, maybe: if seller knew or had constructive knowledge (willfully turned a blind eye; contrived ignorance), then seller may be constructive trustee of the \$ for the principal.]	<i>Idem as above – left</i> <i>Issue of DAO-Principal SC payment trigger not conditional to verified book transfer in 3 ways relationship – sort of "SC Mexican Standoff"</i> <i>DAO-Principal screwed up, thus is he liable???</i>	← same as second left column +is Principal even more liable to 3 rd Party for hiring bad Agent & not spotting SC vulnerabilities that resulted in DAO-Agent's fraud – weak SC: Principal "should know".	<i>Is Principal liable to DAO-TP who can't recover their book, since DAO-TP are the one who screwed up SC in the first place, that allowed Agent to abscond with book and/or money. Isn't DAO-TP almost liable to Principal to make it so easy to get defrauded by Agent? ("It is all your fault, you DAO-TP etc.")</i>

-4- Rights and responsibilities of Agent to Principal	Agent executes mission objectives, methods, procedures, secures mutual understanding between 3 rd Party & Principal + Agency Law add-on with duty of care, fiduciary duty, etc.	Agent liable to principal -- breach of fiduciary duties, tort of conversion, possibly fraud if this was a premeditated scheme.	← same as remark on the next column left + since Agent could have premeditated to exploit flaws in DAO-Principal SC, poorly structured transx let him abscond.	← same as left remark + DAO-Agent needs make sure SC robust enough to warrant secure transaction, kind of “SC Fiduciary”. Duty of care to verify SC & mutual robustness.	← same as left remark + If Principal mandates Agent to accept DAO-TP, fact Agent avoid assessing with Principal risks related to DAO-TP SC amateurism is already suspicious – duty of care & fiduciary duty.
-5- Rights and responsibilities of Agent to Third Party	Agent transact with 3 rd Party on behalf of Principal, with actual / apparent authority, in ways that are duly represent Principal. + Agency Law adds-on.		<i>Idem as above – left Cautionary Tale, since it’s obvious this may happen a lot as we may transition to AALE DAO-based economy .</i>	Even honest DAO-Agent needs make sure SC robust enough to warrant secure transaction, that 3 rd Party is SC literate, DAO-Agent deterred from abusing any such SC vulnerability.	<i>Agent transacting with DAO-TP SC need verify deal/ payment terms are secured for Principal & 3rd Part- if trigger conditional to verified book transfer is missing, not to abuse that.</i>
-6- Rights and responsibilities of Third Party to Principal	3rd Party deliver its end of the deal, get retributed accordingly by Principal directly or via Agent + mutual understanding + Agency Law adds-on.		<i>Is 3rd Party entitled to claim damages to DAO-Principal under above question of liability also for failing with SC etc.</i>	Under tort of conversion, DAO-Agent is liable vis-à-vis Principal to not get book delivered &/or not paying 3 rd Part. Suspicion SC premeditated scheme.	<i>DAO-TP engaging with Principal needs to verify Principal’s and own SC literacy, not understanding what one deals with is an invitation to weakness abuse by Agent fraudster.</i>
-7- Rights and responsibilities of Third Party to Agent	3rd Party deliver its end of the deal, get retributed accordingly by Principal directly or via Agent + mutual understanding + Agency Law adds-on.		<i>Is 3rd Party entitled to claim damages against main culprit Agent in case he absconded with at least book?</i>	<i>Is 3rd Party entitled to claim damages against main culprit DAO-Agent in case he absconded with at least the book but left behind money?</i>	<i>Is DAO-TP entitled to claim damages against main culprit Agent in case he absconded with book but left behind money – or is weak SC a claim killer?</i>

--3A--	--3B-- Common Facts &/or Frameworks toward AALE specifically	--3C-- Scenario 3 before permuting DAO among actors	--3D-- Scenario 3 with Principal as DAO (DAO-Princ.)	--3E-- Scenario 3 with Agent as DAO (DAO-Agent)	--3F-- Scenario 3 with Third Party as DAO (DAO-TP)
-8- “Manifestation of assent to another person” and “Manifestation of assent or otherwise consents so to act”	AALE conduct that warrants sufficient CL Manifestations i.e. other than understood as “de facto action by a human that is necessary & sufficient to indicate consent”.	Required human manifestations were provided between Principal & Agent only for sourcing the book	<i>Disingenuous Agent might argue about DAO-Principal’s deficiency in Manifestation of Assent.</i>	“Manifestation of assent” for DAO-Agent sealed by compliance with SC terms that trigger deal&payment, still, poorly structured SC remains, allowing fraud.	<i>With DAO-TP flawed SC, “Manifestation of assent” is materialized by compliance with SC terms insufficiently structured, allowing blatant fraud. Is that still a form of Assent?</i>
-9- Parties' Labeling and Popular Usage Not Controlling	AALE contract processes part and parcel of “industry or popular usage”	No particular comment	<i>When will DAOs SC processes be part and parcel of “industry or popular usage” ???</i>	When will DAOs SC processes be part and parcel of “industry or popular usage” ???	<i>When will DAOs SC processes be part and parcel of “industry or popular usage” ???</i>
-10- Disclosed, undisclosed, and unidentified principals	These variants remain relevant for AALE actors.	Does it make a difference whether seller knew agent was acting agent for principal & relied on that in transacting? To explore variants at DAO stage	<i>Undisclosed / disclosed DAO-Principal doesn’t change the fact that SC “reveals” it’s a DAO anyway.</i>	Undisclosed / disclosed Principal doesn’t change the fact that DAO-Agent SC disclose that Principal is involved anyway?	<i>Undisclosed / disclosed Principal doesn’t change the fact that DAO-TP SC disclose that Principal is involved anyway?</i>
-11- Special case of Disclosed but unidentified principals	Could be AALE common situation: ano/pseudonymous - ring signatures warrant caution	To explore Disclosed but Unidentified Principal at DAO permutation stage	<i>Agent is well aware it steals from Disclosed DAO-Principal even if Unidentified.</i>	Business can still be done provided DAO-Agent authorizes Principal to use ano- / pseudo-nymous, ring signatures, etc., then who is responsible, etc.?	Business can still be done provided DAO-TP authorizes Principal to use ano- / pseudo-nymous, ring signatures, etc., then who is responsible, etc.?
-12- Notice & Proof of Agreement:	Understanding parties mutually agree on a given "state" of affairs in an AALE context		<i>Agent in contempt of Notice & Proof of Agreement even if in SC with DAO-Principal.</i>	Use of DAO-Agent SC by Principal & 3 rd Party warrants there exists mutual understanding & agreement on terms, but flawed SC allows fraud.	<i>DAO-TP SC for Principal + Agent warrant mutual understanding & agreement, but doesn’t preclude deliberate fraud.</i>

-13- Actual Authority vs Apparent Authority	Define for AALE: “manifestation”, “belief”, cognitive, communication, validation & state confirmation processes.		<i>Actual Authority given to Agent by DAO-Principal SC, doesn't change the fact that Agent is a fraud.</i>	← same as remark on the 2 nd next column left. If Principal confers Authority to DAO-Agent via SC then there is no ambiguity about it, if verified with 3 rd Party in neat terms. If SC is poorly structured, 3 rd Party might argue Authority is moot, to sue Principal???	<i>DAO-TP using SC that involves Principal may force Agent to clarify & Principal to streamline issues of Actual vs Apparent Authority. Does it have an impact on Principal's liability???</i>
-14- Estoppel to deny existence of Agency relationship	Liability to Principal AALE or when abusive Agent is AALE	Principal not going as far as denying Agency relationship	<i>Principal not going as far as denying Agency relationship.</i>	Isn't it hard to deny a DAO-Agency relationship with Principal if SC based?	<i>If DAO-TP encoded SC involves Agent in addition to Principal, it's hard to deny Agency relationship.</i>

--3A--	--3B-- Common Facts &/or Frameworks toward AALE specifically	--3C-- Scenario 3 before permuting DAO among actors	--3D-- Scenario 3 with Principal as DAO (DAO-Princ.)	--3E-- Scenario 3 with Agent as DAO (DAO-Agent)	--3F-- Scenario 3 with Third Party as DAO (DAO-TP)
-15- Liability of Undisclosed Principal	If Agent is AALE , Undisclosed Principal must do due diligence	Is principal liable to Third Party seller for the \$ even though agent stole book (and money)? Does it make a difference whether seller knew agent was acting agent for principal and relied on that in transacting?	← same as left column + Had DAO-Principal used SC that triggers payment to Agent only once book transfer verified, it would have not lost \$ but may still have liability for stolen book. But using SC means “disclosure”.	Undisclosed Principal need to do due diligence on DAO-Agent to figure out whether the use of SC doesn't result in P's de facto Disclosure?	<i>Undisclosed Principal need to do due diligence on DAO-TP to figure out whether the use of SC doesn't result in P's de facto Disclosure + due diligence to figure flawed SC might trigger fraud that with Principal's liability.</i>
-16- Capacity to Act as Principal or as Agent	Definition of capacities for AALE	No issue of capacity in human scenario	<i>Definition of capacity for (AALE) DAO-Principal to act as Principal (AL).</i>	Definition of capacity for (AALE) DAO-Agent to act as Agent under AL.	<i>Capacity to Act as Principal or as Agent must include SC literacy for dealing with DAO-TP.</i>

-17- Imputation of Notice of Fact to Principal	Define “Imputation of Notice of Fact” process for AALE	No particular comment	<i>Define SC “Imputation of Notice of Fact” process for AALE DAO-Principal</i>	Define SC “Imputation of Notice of Fact” process for AALE DAO-Agent	<i>Define SC “Imputation of Notice of Fact” process for AALE DAO-TP.</i>
-18- Agent who acts adversely to a Principal	Adversarial AALE: deliberate, bugged or hacked	Agent is adversarial	<i>Agent is VERY adversarial to DAO-Principal & 3rd Party.</i>	Agent is VERY adversarial to DAO-Principal & 3 rd Party.	<i>Agent is VERY adversarial to DAO-Principal & 3rd Party.</i>
-19- Fraud	AALE gone rogue	Fraud by Agent	<i>Fraud by Agent</i>	Fraud by Agent	<i>Fraud by Agent.</i>
-20- Fiduciary Duty	AALE to be engineered for that	Agent liable to principal -- breach of fiduciary duties, tort of conversion, possibly fraud if this was a premeditated scheme.	<i>← same as left column + Agent is liable to DAO-Principal. Even if Agent argues “the flawed SC made me do it” this is still a fraud.</i>	← same remark as on left column. DAO-Agent is even more suspicious for premeditated use of flawed SC to allow himself to commit fraud book/money	<i>← same remark as on left column + Principal need to be SC literate to verify DAO-TP SC flaws do not risk to trigger fraud + could DAO-TP be liable to Principal if flawed SC is breach of fiduciary duty?</i>
-21- Incorrect Belief	AALE cognition	Inc. Belief in Agent integrity	<i>I.B. in Agent’s integrity triggers consequence of flawed SC execution.</i>	I.B. in DAO-Agent’s integrity triggers consequence of flawed SC execution.	<i>I.B. in Agent integrity triggers consequence of flawed SC execution.</i>

--3A--	--3B-- Common Facts &/or Frameworks toward AALE specifically	--3C-- Scenario 3 before permuting DAO among actors	--3D-- Scenario 3 with Principal as DAO (DAO-Princ.)	--3E-- Scenario 3 with Agent as DAO (DAO-Agent)	--3F-- Scenario 3 with Third Party as DAO (DAO-TP)
-22- Presumed Due Diligence	AALE cognition	Bad due diligence on Agent	<i>DAO-Principal failed Due Dil. 1- on Agent prior to sending it to 3rd Party & 2- on robust SC.</i>	Fraudster DAO-Agent will select patsy Principal with little SC literacy for free hand in defrauding P+TP.	<i>DAO-TP & Principal failed due diligence on fraudster Agent.</i>

-23- Duty of Care	AALE cognition		<i>Agent doesn't care about Duty of Care + DAO-Principal is careless.</i>	Eye-opening cautionary tale is need for Principal & 3 rd Party to make sure SC has no flaws exploitable by unscrupulous DAO-Agent.	Eye-opening cautionary tale is need for DAO-TP to make sure SC has no flaws exploitable by fraudster & adversarial Agent.
-24- Agent Absconds with something	AALE gone rogue	Agent absconds with Money and / or Book	<i>Agent absconds with Money and / or Book</i>	Agent absconds with Money and / or Book	<i>Agent absconds with Money and / or Book</i>
-25- Not in Scope of Authority	AALE gone rogue		--- Fraud ---	There could be issues of DAO-Agent gone "rogue" either deliberately (admin) or by bad engineering (bug) or having got hacked (issues of liabilities & insurance), that would result in DAO-Agent not in scope of Authority. Not sure how background circumstances would affect Principal claim.	<i>There could be issues of DAO-TP gone "rogue" either deliberately (admin) or by bad engineering (bug) or having got hacked by bad actors syphoning funds (issues of liabilities & insurance), that would result in DAO-TP exposed to fraud by Agent acting beyond scope of authority.</i>
-26- Failure to recognize poor Intent	AALE cognition	Poor intent by Agent	<i>DAO-Principal & 3rd Party failure (compounded by SC flaws) to Recognize Poor Intent by Agent.</i>	Principal+3 rd Party failure (compounded by SC flaws) to Recognize Poor Intent by DAO-Agent.	<i>Principal & DAO-TP failure (compounded by SC flaws) to Recognize Poor Intent by Agent.</i>
-27- More Estoppel		?	?	?	?
-28- Settlement with Agent by Principal or Third Party	AALE settlement mechanism	---	<i>If DAO-Principal is forced to settle Agent damage with 3rd Party, any clause in SC?</i>	DAO-Agent likely avoided inserting SC mechanism that facilitates settlement against itself DAO-Agent.	<i>Settlement mechanism at DAO-TP level only via SC means damage control at that level only, so how to get book/money? Fix SC.</i>

--3A--	--3B-- Common Facts &/or Frameworks toward AALE specifically	--3C-- Scenario 3 before permuting DAO among actors	--3D-- Scenario 3 with Principal as DAO (DAO-Princ.)	--3E-- Scenario 3 with Agent as DAO (DAO-Agent)	--3F-- Scenario 3 with Third Party as DAO (DAO-TP)
-29- Agent's Implied Warranty of Authority & Representations	Case of AALE gone “rogue”, deliberately, or by poor engineering, or just got hacked		<i>Define to which extent DAO-Principal using SC with Agent, has impact on Agent's IWoAR ???</i>	Define to which extent Principal using SC with DAO-Agent, has impact on Agent's IWoAR ???	<i>See above on Authority if DAO-TP seals Agent Authority vis-à-vis Principal via SC.</i>
-30- Point of Failure of Transfer / Object not Transferred	AALE: technical cause, deliberate, bugged, hacked.	Taken also in the meaning of technical point of failure, in addition to deliberate fraud or negligence by Actor.	<i>Book and/or money not transferred. Fraud by Agent. Poorly structured SC accounts as technical point of failure though.</i>	Deliberate fraud by DAO-Agent. Using flawed SC accounts as technical point of failure, even if a premeditated one for fraud.	<i>←See remark on the left. Agent absconded, thus book and/or money weren't transferred, flawed SC is fraud enabler</i>
-31- Information Corrupted	Idem as above	Idem as above	<i>No info corruption issue, just fraud by Agent.</i>	No info corruption issue, just fraud by Agent.	<i>What if DAO-TP SC terms are corrupted / hacked?</i>
-32- Binding to Kind of Law	---	---	---	Other Laws that apply, such as Contract Law, Supply Chain integrity.	<i>Other Laws that apply, such as Contract Law, Supply Chain integrity.</i>
-33- Techno-legal structure of a contract	---	---	<i>Cautionary tale is need for 3rd Party to make sure DAO-Principal SC are properly structured!</i>	Cautionary tale is need for Principal & 3 rd Party to make sure DAO-Agent SC are properly structured!	Cautionary tale: need for DAO-TP to structure SC with payment conditional to book transfer verified, or, invite fraud by Agent.
-34- Scope of Employment & Hierarchies	---	---	---	---	---
-35- Future of Work	---	---	---	---	---

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2nd iteration (scroll down for previous drafts)

2019 July 10th - Chris B. DRAFT Unverified – AALEs vs Agency Law

Support-mémo following June 24th and prior to July 15th Live Session for

Autonomous and Automated Legal Entities Hack - HackMD

MIT Media Lab Computational Law with Dazza, Brenden, Beth et al.

Preparation for our July 15th Live session, this 2nd iteration, hacked yesterday, takes a stab at a table converging with the HackMD methodology: the 3 columns on the right are for the scenarios 1, 2, 3 BEFORE permuting any actor as DAO. In the rows, you find actors' interactions items to look at, they incorporate the gist of HackMD content so far, as well as some of the classifications nailed in previous "AALE vs Agency Law" check-list. Still trying to keep it simple and (not too) stupid, while converging toward a DAO scenario baseline. It could certainly be further defined, further refined, and further simplified.

Next to the first left column that defines the rows items, the second column on the left is "Common Facts and/or Frameworks toward AALE specifically", it is intended to prepare the ground for our 3rd iteration, for later this week. The 3rd iteration will tackle the DAO/actor permutations (see columns template): there may be 3 tables 1-2-3, one per scenario. In each table the 3 columns on the left may be the rows items definitions, then "Common Facts and/or Frameworks toward AALE specifically" then one column corresponding to scenario 1, 2, or 3, with content taken from 2nd iteration. Then, next 3 columns will be 3 DAO/actor permutations (Principal, Agent, Third Party). From that, content may, if relevant & exploitable, be extracted and further defined, refined, & simplified, for HackMD's next template stage. Better ways to do this asap now wouldn't manifest!

The road of "Granularity & Complexity" (as rightly coined by Cem F) leads to the palace of HackMD Format Simplicity! I realize this table is still very rough, just the "table model thinking" is clumsy to start with, but it does force you to do the legal & model thinking in a systematic, if still often visually intuitive, way. I just needed specifics, to run this cycle asap now prior to July 15th to get a first feel of how real this thing is, and then we'll start a new cycle afterward. I realize this table barely starts to bring more definition to items previously put forth, here we are now. In order to tackle our next templates, just to itemize and define the rows items, an Agency Law flow chart might give us functional boxes, each of these boxes would include a finite set of components, to keep it palatable. I haven't had a vision yet of how that AL flow chart might look, may come in due time.

	Common Facts &/or Frameworks toward AALE specifically	Scenario 1 before permuting DAO among actors	Scenario 2 before permuting DAO among actors	Scenario 3 before permuting DAO among actors
Scenarios descriptions	Principal engages agent to find and purchase a rare book. --- Agent finds book seller and makes an offer --- The seller now becomes the third party.	Third party accepts payment plan proposed by Agent --- Third party delivers book to agent and no money changes hands --- Agent delivers book to principal --- Principal fails to pay after first installment because she claims agent had no authority to bind her to a payment plan.	Same-ish as Scenario 1, but third party takes money yet never delivers book to agent	Same-ish as Scenario 1, but agent absconds with: Just book / Just money / Book and money
Rights and responsibilities of Principal to Agent	Principal hires Agent, define and structure Agent's mission objectives, methods, procedures + Agency Law add-on	If the agent is acting in the scope of its authority from the third party perspective (i.e. apparent/ostensible authority) but if the agent went outside scope of actual authority then the principal may have a claim against the agent, for example, for the money obligation above the set amount that the agent agreed to pay.	Section 7 of the restatement of agency speaks to what needs to happen in specific vignettes when relations break down between parties.	
Rights and responsibilities of Principal to 3rd Party	Principal delivers its end of the deal, retributes accordingly the 3 rd party directly or via Agent + mutual understanding etc + Agency Law adds-on.		Idem as above -	Is principal liable to seller for the \$ even though agent stole book (and money)? Does it make a difference whether seller knew agent was acting agent for principal and relied on that in transacting? --- In the scenario where agent stole book but Third Party seller got the \$, does principal have a claim to get the \$ back? [Under English law, maybe: if seller knew or had constructive knowledge (willfully turned a blind eye; contrived ignorance), then seller may be constructive trustee of the \$ for the principal.]
Rights and responsibilities of	Agent executes mission objectives, methods, procedures, secures mutual understanding between 3 rd Party & Principal +	If principal was "undisclosed" the agent may (would?) also be liable for the obligation.	Idem as above + Agent may have breached duty of care to principal by doing insufficient due diligence into seller or	Agent liable to principal -- breach of fiduciary duties, conversion, possibly fraud if this was a premeditated scheme.

Agent to Principal	Agency Law add-on with duty of care, fiduciary duty, etc.		structuring transaction poorly (i.e., giving money w/o getting book at same time).	
Rights and responsibilities of Agent to Third Party	Agent transact with 3 rd Party on behalf of Principal, with actual / apparent authority, in ways that are duly represent Principal. + Agency Law adds-on.		Idem as above -	
Rights and responsibilities of Third Party to Principal	3rd Party deliver its end of the deal, get retributed accordingly by Principal directly or via Agent + mutual understanding + Agency Law adds-on.	The third party can't "double dip" and get contract amount from BOTH the agent and principal	Idem as above + Third Party Seller could also be liable to principal and/or agent under tort of conversion.	
Rights and responsibilities of Third Party to Agent	3rd Party deliver its end of the deal, get retributed accordingly by Principal directly or via Agent + mutual understanding + Agency Law adds-on.	The third party can't "double dip" and get contract amount from BOTH the agent and principal	Idem + Third Party Seller could also be liable to principal and/or agent under tort of conversion --- Some arguments 3 rd party can make: perhaps Agent had no authority to accept book on behalf of Principal but they would (presumably) still have obligation to deliver book to Principal.	

	Common Facts &/or Frameworks toward AALE specifically	Scenario 1 before permuting DAO among actors	Scenario 2 before permuting DAO among actors	Scenario 3 before permuting DAO among actors
“Manifestation of assent to another person” and “Manifestation of assent or other-	AALE conduct that warrants sufficient CL Manifestations i.e. other than understood as “de facto action by a human	Required human manifestations were provided between Principal & Agent only for sourcing the book --- Principal allows herself to	Required human manifestations were provided between Principal & Agent only for sourcing the book	Required human manifestations were provided between Principal & Agent only for sourcing the book

wise consents so to act”	that is necessary & sufficient to indicate consent”.	claim the Agent bound her to an unapproved payment scheme		
Parties' Labeling and Popular Usage Not Controlling	AALE contract processes part and parcel of “industry or popular usage”	No particular comment yet	No particular comment	No particular comment
Disclosed, undisclosed, and unidentified principals	These variants remain relevant for AALE actors.	To explore variants at DAO stage	To explore variants at DAO stage	Does it make a difference whether seller knew agent was acting agent for principal & relied on that in transacting? To explore variants at DAO stage
Special case of Disclosed but unidentified principals	Could be AALE common situation: ano/pseudonymous - ring signatures warrant caution	To explore Disc-Unid at DAO stage	To explore Disc-Unid at DAO stage	To explore Disc-Unid at DAO stage
Notice & Proof of Agreement:	Understanding parties mutually agree on a given "state" of affairs in an AALE context	Agreement on payment scheme was missing		
Actual Authority vs Apparent Authority	Define for AALE: “manifestation”, “belief”, cognitive, communication, validation & state confirmation processes.		Some arguments third party can make: perhaps Agent had no authority to accept book on behalf of Principal but they would (presumably) still have an obligation to deliver the book to Principal.	
Estoppel to deny existence of Agency relationship	Liability to Principal AALE or when abusive Agent is AALE	Principal not going as far as denying Agency relationship	Principal not going as far as denying Agency relationship	Principal not going as far as denying Agency relationship

	Common Facts &/or Frameworks toward AALE specifically	Scenario 1 before permuting DAO among actors	Scenario 2 before permuting DAO among actors	Scenario 3 before permuting DAO among actors
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Liability of Undisclosed Principal	If Agent is AALE , Undisclosed Principal must do due diligence			Is principal liable to Third Party seller for the \$ even though agent stole book (and money)? Does it make a difference whether seller knew agent was acting agent for principal and relied on that in transacting?
Capacity to Act as Principal or as Agent	Definition of capacities for AALE	No issue of capacity in human scenario	No issue of capacity in human scenario	No issue of capacity in human scenario
Imputation of Notice of Fact to Principal	Define“Imputation of Notice of Fact” process for AALE	No particular comment	No particular comment	No particular comment
Agent who acts adversely to a Principal	Adversarial AALE: deliberate, bugged or hacked	Agent is NOT adversarial	Agent is NOT adversarial	Agent is VERY adversarial
Fraud	AALE gone rogue	No Fraud by Agent – Principal’s attitude may not count as fraud.	Fraud by Third Party Seller	Fraud by Agent
Fiduciary Duty	AALE to be engineered for that	Agent should have first confirmed payment scheme with Principal.	Agent is in breach of duty of care rather than of fiduciary duty.	Agent liable to principal -- breach of fiduciary duties, conversion, possibly fraud if this was a premeditated scheme.
Incorrect Belief	AALE cognition	Inc.Bel. payment scheme was agreed	Inc. Belief in Third Party integrity	Inc. Belief in Agent integrity

	Common Facts &/or Frameworks toward AALE specifically	Scenario 1 before permuting DAO among actors	Scenario 2 before permuting DAO among actors	Scenario 3 before permuting DAO among actors
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Presumed Due Diligence	AALE cognition		Agent in breach of duty of care/failed to vet Third Party to avoid fraud.	Bad due diligence on Agent
Duty of Care	AALE cognition		Agent may have breached duty of care to principal by doing insufficient due diligence into seller or structuring transaction poorly (i.e., giving money w/o getting book at same time).	
Agent Absconds with something	AALE gone rogue			Agent absconds with Money and / or Book
Not in Scope of Authority	AALE gone rogue	If the agent is acting in the scope of its authority from the third party perspective (i.e. apparent/ostensible authority) but if the agent went outside scope of actual authority then the principal may have a claim against the agent, for example, for the money obligation above the set amount that the agent agreed to pay.		
Failure to recognize poor Intent	AALE cognition	Poor intent by Principal	Poor intent by Third Party	Poor intent by Agent
More Estoppel		?	?	?
Settlement with Agent by Principal or Third Party	AALE settlement mechanism	---	---	---

	Common Facts &/or Frameworks toward AALE specifically	Scenario 1 before permuting DAO among actors	Scenario 2 before permuting DAO among actors	Scenario 3 before permuting DAO among actors
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Agent's Implied Warranty of Authority & Representations	Case of AALE gone “rogue”, deliberately, or by poor engineering, or just got hacked			
Point of Failure of Transfer / Object not Transferred	AALE: technical cause, deliberate, bugged, hacked.	Took in the meaning of technical point of failure, not deliberate fraud or negligence by actor.	Took in the meaning of technical point of failure, not deliberate fraud or negligence by actor.	Took in the meaning of technical point of failure, not deliberate fraud or negligence by actor.
Information Corrupted	Idem as above	Idem as above	Idem as above	Idem as above
Binding to Kind of Law	---	---	---	---
Techno-legal structure of a contract	---	---	---	---
Scope of Employment & Hierarchies	---	---	---	---
Future of Work	---	---	---	---

Template for upcoming 3rd iteration - Table 1 running DAO/actor permutations for Scenario 1 (Table 2, 3 → Scenario 2, 3),

Contents for rows items definition columns, column “Common Facts &/or Frameworks toward AALE specifically” and column “Scenario 1 before permuting DAO among actors” are fed from above 2nd iteration table – repeat for Table 2 & 3 for Scenario 2 & 3.

	Common Facts &/or Frameworks toward AALE specifically	Scenario 1 before permuting DAO among actors	Scenario 1 with Principal as DAO	Scenario 1 with Agent as DAO	Scenario 1 with Third Party as DAO
Scenarios descriptions	Principal engages agent to find and purchase a rare book. --- Agent finds book seller and makes an offer --- The seller now becomes the third party.	Third party accepts payment plan proposed by Agent --- Third party delivers book to agent and no money changes hands --- Agent delivers book to principal --- Principal fails to pay after first installment because she claims agent had no authority to bind her to a payment plan.			
Rights and responsibilities of Principal to Agent	Principal hires Agent, define and structure Agent’s mission objectives, methods, procedures + Agency Law add-on	If the agent is acting in the scope of its authority from the third party perspective (i.e. apparent/ostensible authority) but if the agent went outside scope of actual authority then the principal may have a claim against the agent, for example, for the money obligation above the set amount that the agent agreed to pay.			
Rights and responsibilities of Principal to 3rd Party	See Agency Law Adds-on				

Rights and responsibilities of Agent to Principal	Agent executes mission objectives, methods, procedures, secures mutual understanding between 3 rd Party & Principal + Agency Law add-on with duty of care, fiduciary duty, etc.	If principal was "undisclosed" the agent may (would?) also be liable for the obligation.			
Rights and responsibilities of Agent to Third Party	Agent transact with 3 rd Party on behalf of Principal, with actual / apparent authority, in ways that are duly represent Principal. + Agency Law adds-on.				
Rights and responsibilities of Third Party to Principal	3rd Party deliver its end of the deal, get retributed accordingly by Principal directly or via Agent + mutual understanding + Agency Law adds-on.	The third party can't "double dip" and get contract amount from BOTH the agent and principal			
Etc. continue on with column rows items ...					

2019 July 8th - Chris B. DRAFT Unverified – AALEs vs Agency Law
Support-mémo following June 24th and prior to July 15th Live Session for
Autonomous and Automated Legal Entities Hack - HackMD
MIT Media Lab Computational Law with Dazza, Brenden, Beth et al.

Using the Restatement of the Law of Agency (Third) framework as per Berkeley's reader doc, comments inserted in italics in case an AALE is one of the actors Principal/Agent/Third Party. Useful points are credited to AALE members, omissions, mistakes & confusions are ours only.

Preparing our July 15th session - what could possibly go wrong when DAOs are one of the actors, and how do we figure this out in our book scenarios, all the while keeping things as simple as possible & manageable within the MIT CL AALE HackMD format?

Last Sat. July 6th, I figured a check-list of issues & questions when AALEs are in the mix, just by dumbly applying the Law of Agency Restatement (Third) Berkeley framework.

As a non-lawyer I merely scratched the surface using common sense, the check-list is likely incomplete & flawed, and your guess will be as good as mine. Also, this doesn't integrate recent non-AALEs legal developments like new types of LLCs, etc., which will have to be part of our angles at some point. Would that help us sort out our book scenarios? We'll see.

But at least, as a preliminary step, as we figure a proper mechanism design, this shows us one simple thing, *having to deal with functional stuff like: "manifestation of assent" "notice" "apparent authority" "disclosed but unidentified Principal" "Estoppel"... mere mutual understanding & agreement on a given "state" of affairs ... and what should be the definition and structure of a "contract" ...* well, then our AALEs/DAOs are cognitively challenged and have communication issues - maybe just like a regular dysfunctional human.

In that sense, if we can find how DAOs current under-the-hood technical prowess & limitations do these functional jobs, or don't, maybe we can refine some scenarios and figure our options. In particular the use of DAOs may either exacerbate possible dysfunctions, or help to mitigate them by virtue of legally-enforced coding, although this too has its limitations. And if we can refine that, we may also, in due time, start to ponder retro-planning our deliverables & structure our future sessions, with properly delineated objectives & gradual, careful steps - hack our ways delivering on budget and on schedule.

(hey, July 16th - not 15th - is the 50th anniversary of Apollo 11's launch, Mooning on 20th!)

Restatement of the Law, Agency 3d - Official Text

Selected sections from Chapters 1, 2, 3, 5, 6 and 7:

§ 1.01 Agency Defined

Definitions of “manifestation of assent to another person” and “manifestation of assent or otherwise consents so to act” by AALE may have to be refined in the context of manifestations other than oral, written or what is commonly understood ad de facto action by a human that is necessary & sufficient to indicate consent, instead adapted to the ways AALEs would work.

§ 1.02 Parties' Labeling and Popular Usage Not Controlling

Clarify the scope of “Not Controlling” if / when / once AALE & smart contract / autonomous automated contractual processes are part and parcel of “industry or popular usage”.

§ 1.03 Manifestation

“A person manifests assent or intention through written or spoken words or other conduct.”

While “or other conduct” is vague enough to warrant inclusion of AALE situations, it might be useful to refine the definition of AALE non-human conduct that are necessary & sufficient to warrant “manifestation”.

§ 1.04 Terminology

- (1) Coagents. Coagents have agency relationships with the same principal. (...) *Refine for AALE meaning of “actually or apparently authorized”.*
- (2) Disclosed, undisclosed, and unidentified principals. (a) Disclosed pr. (b) Undisclosed pr.

(c) Unidentified principal. *In AALE context, disclosed unidentified principal may be common situation in anonymous / pseudonymous / ring signatures situations, thus warranting caution .*

(3) Gratuitous agent.

(4) Notice. A person has notice of a fact if the person knows (...) *“Notice” could be slippery ground in AALE context due to the fact that it relates to cognitive processes cognizant to or implicit from any traditional human or administrative organization. In other words, for any particular AALE-AALEs or AALE-human interaction, how do each party “confirm” that they agree on the fact that they agree on any particular interpretation of notice given or received. On mutual understanding, see in particular below “§ 2.02 Scope of Actual Authority”.*

(5) Person. A person is (a) an individual; (b) an organization or association that has legal capacity to possess rights and incur obligations; (c) a government, political subdivision, or instrumentality or entity created by government; or (d) any other entity that has legal capacity to possess rights and incur obligations. *The following is purely intuitive: “(5) Person” might want to be taken out of “§ 1.04 Terminology” (perhaps together with (4) Notice) and put in an introductory paragraph “Preliminary Assumptions”. As AALES primarily fall under (d) but may overlap with (b) and (c), they may require their own category (one category to start with and keep it simple). This category may indicate minimum necessary & sufficient criteria to qualify as AALE. One clear reason to do this for both (5) Person & (4) Notice is to have a clear legal foundation for reasonable expectations and anticipations of problems in the context of autonomous / automated processes of language, cognition, notice, confirmation, validation.*

(6) Power given as security. *Subject to previous remarks on refining necessary & sufficient conditions (criteria) for “manifestation” in an AALE context.*

(7) Power of attorney. A power of attorney is an instrument that states an agent's authority. *Subject to refinement in an AALE context including but not limited to smart contracts.*

(8) Subagent. *May explore this clause in context of human or non-AALE hiring an AALE (that for ex. manages a fleet of drones which could be hacked...).*

(9) Superior and subordinate coagents. A superior coagent has the right, conferred by the principal, to direct a subordinate coagent. *May explore in context of human or non-AALE subordinates being managed by superior AALE agent to prevent Labor Law issues & riots.*

(10) Trustee and agent-trustee. *Also relevant to AALE & digital/crypto assets custodians.*

§ 2.01 Actual Authority

Relevant to definitions of “manifestation”, “belief”, and related cognitive, communication, validation & confirmation processes in context of AALE-human and AALE-AALE interactions.

§ 2.02 Scope of Actual Authority

- (1) Need to refine the formalization and codification of “reasonable understanding” by an AALE agent and what that implies for the formalization and codification of the principal's manifestations and objectives when the principal is either a non-AALE or an AALE.*
- (2) If a “reasonable (human / organization) person’s interpretation” is to be taken as benchmark, then it further implies such criteria to be formalized and codified at minima as part of the AALE agent’s cognitive process. Same for the translation, formalization and codification of the AALE agent’s fiduciary duties.*
- (3) On “mutual understanding” see remarks in “§ 1.04 Terminology (4) Notice”.*

§ 2.03 Apparent Authority

Since belief by third party must be traceable to the principal’s manifestations, then this plugs back to refining definition of such “believable manifestations” when the principal is an AALE. When the principal is an AALE, then this AALE’s manifestations have to be formalized in a way that is understandable and believable by a non-AALE third party (there could be direct implication on triggering Estoppel in favor of principal or not). When both principal and third party are AALEs, then we might want to be mindful of how much minimum common language in formalization and coding is necessary between them to minimize problematic ambiguities.

§ 2.04 Respondeat Superior

An employer is subject to liability for torts committed by employees while acting within the scope of their employment. This could be in particular examined both ways: when employer is an AALE and (some of) the employees are humans ; or, when the employer is human and (some of) the employees are AALEs – that utilize fleets of drones which could be hacked for ex.

§ 2.05 Estoppel to Deny Existence of Agency Relationship (*Estoppel, what a lovely concept*)

A person who has not made a manifestation that an actor has authority as an agent and who is not otherwise liable as a party to a transaction purportedly done by the actor on that person's account is subject to liability to a third party who justifiably is induced to make a detrimental change in position because the transaction is believed to be on the person's account, if

- (1) the person intentionally or carelessly caused such belief, or *If the person is an AALE, it's hard to see how it can prevent such a situation from arising: could a disclaimer, and an early third party registration process that invalidates non-authorized agents, even be sufficient?*
- (2) having notice of such belief and that it might induce others to change their positions, the person did not take reasonable steps to notify them of the facts. *If the person is an AALE, then again this shows the dire need of formalizing and coding the cognitive and communication act of "notice" of that particular situation, and the necessary devices to "notify" third parties of the facts, in ways indeed intelligible to third parties under conditions defined as "notice".*

§ 2.06 Liability of Undisclosed Principal

(1) *The fact that the principal is an AALE may not have particular incidence or relevance on top of the fact that this principal is an undisclosed one. Then, other than that, same remarks on cognitive, communication and "notice" process when principal is AALE. When agent is AALE, the onus is on the undisclosed principal to due proper due diligence on AALE processes before hiring – which again suggests notions of formalization, coding and industry standards.*

(2) *Same remark as (1).*

§ 2.07 Restitution of Benefit

If principal is an AALE, it should incorporate proper mechanisms to deal with such claims.

§ 3.01 Creation of Actual Authority

Same remarks on "manifestation" when Principal and / or Agent are AALEs.

§ 3.02 Formal Requirements

If the law requires a writing or record signed by the principal to evidence an agent's authority to bind a principal to a contract or other transaction, the principal is not bound in the absence of such a writing or record. A principal may be estopped to assert the lack of such a writing or record when a third party has been induced to make a detrimental change in position by the reasonable belief that an agent has authority to bind the principal that is traceable to a manifestation made by the principal. *Perhaps Agency Law may not be sufficient to cover, also in the context of AALEs, implications for contract law, property law, etc, and consequences on, for ex., mechanisms to warrant supply chain integrity, such as: certificates of origin, of conformity, of quality, bill of lading, shipment tracking, etc. How to implement supply chain integrity components with AALEs at principal and/or agent and/or third-party level, etc, when some or all of these components are themselves operating in autonomous / automated fashion. Furthermore, there is a fundamental question here for Contract Law: when one or several among Principal – Agent – Third Party are AALE(s), what becomes of the technical definition of a “contract” when all or some of these AALE(s) parties are signatories, next to human or administrative “persons”. Is “contract” just a piece of paper or does it require to be encoded or at least have an encoded twin, in which case, what is the legal status of this encoded doppelganger, what are referents for both legal and technical enforcement (classic question, since we’re all quite familiar here with certain “contracts” which are neither legal nor smart).*

§ 3.03 Creation of Apparent Authority

Same remarks as before on “§ 2.03 apparent authority”.

§ 3.04 Capacity to Act as Principal

(1) *An individual is not an AALE.*

(2) *Then how do we define / refine the capacity of an AALE to act as a Principal?*

(3) *If performance of an act is not delegable, its performance by an agent does not constitute performance by the principal. In Present / Future of Work & Business corporate or community frictions or conflicts, we might want to ask whether there could be any situations of: AALE agent intervening in context on non-delegable performance by non-AALE principal ; or of non-AALE agent intervening in context of non-delegable performance by AALE principal.*

§ 3.05 Capacity to Act as Agent

Then how do we define / refine the capacity of an AALE to act as an Agent?

§ 3.06 Termination of Actual Authority--In General

An agent's actual authority may be terminated by: *(conditions may be reviewed for specific processes, in particular their appropriate formalization for principal and/or agent as AALE)*

(1) to (6)

§ 3.07 Death, Cessation of Existence, and Suspension of Powers

(conditions may be reviewed for specific processes, in particular their appropriate formalization for principal and/or agent as AALE) --- (1) to (4)

§ 3.08 Loss of Capacity

(Loss of Capacity conditions may be reviewed for specific processes, in particular their appropriate formalization for principal and/or agent as AALE. A “written instrument” may be reviewed as including code, smart contracts, with related usages & limitations.) --- (1) to (3)

§ 3.09 Termination by Agreement or by Occurrence of Changed Circumstances

Other than (1) conditions defined in the provisions of § 3.10, “(2) upon the occurrence of circumstances on the basis of which the agent should reasonably conclude that the principal no longer would assent to the agent's taking action on the principal's behalf” plugs back to Principal - Agent cognitive, communication, and formalization issues in the context of AALE-AALE and AALE-human interactions.

§ 3.10 Manifestation Terminating Actual Authority

(1) *Same remarks on manifestation, notice and mutual understanding in an AALE context.*

(2) *See §§ 3.12-3.13 and power given as security and proxy to vote securities or other membership or ownership interests that is made irrevocable in compliance with applicable legislation, etc., in an AALE & digital assets context, as legislation evolves as we speak.*

§ 3.11 Termination of Apparent Authority

(1) The termination of actual authority does not by itself end any apparent authority held by an agent. *If termination done by an AALE Principal, (human) Agent may deny termination and try and maintain apparent authority, for relevance and clout in the ecosystem. And if termination made by (human) Principal, an AALE Agent, by virtue on tech impressionability, may still come across with apparent authority vis-à-vis third parties who didn't have a chance to verify.*

(2) Apparent authority ends when it is no longer reasonable for the third party with whom an agent deals to believe that the agent continues to act with actual authority. *Again, a need to specify conditions of “reasonable belief” by third party of authority in AALE context.*

§ 3.12 Power Given as Security; Irrevocable Proxy

See power given as security and proxy to vote securities or other membership or ownership interests that is made irrevocable in compliance with applicable legislation, etc, in an AALE & digital assets context, as legislation is evolving. --- (1) & (2)

§ 3.13 Termination of Power Given as Security or Irrevocable Proxy

Same remark as previous 3.12. --- (1) & (2)

§ 3.14 Agents with Multiple Principals - § 3.15 Subagency - § 3.16 Agent for Coprincipals

3.14., 3.15., 3.16. plug back into above principal / agent problematics in AALE context.

§ 5.03 Imputation of Notice of Fact to Principal

The practical conditions of “imputation” may need to be streamlined when Principal and/or Agent are AALEs, in particular for cognitive, communication and “notice” issues.

§ 5.04 An Agent Who Acts Adversely to a Principal

We may anticipate situations where (human) Agent acts adversely to AALE Principal (friction or social conflict), or, AALE Agent deals adversely to (human) Principal, either deliberately by wicked governance, or by process automatization bug, or because it has been hacked.

On this particular aspect “A third party who deals with a principal through an agent, knowing or having reason to know that the agent acts adversely to the principal, does not deal in good faith for this purpose.”, we may need refinement of conditions if third party is itself an AALE.

§ 6.01 Agent for Disclosed Principal

Same remarks on agreeing to agree on and confirm mutual understanding in AALE context.

§ 6.02 Agent for Unidentified Principal

In case of disclosed but unidentified AALE Principal in anonymous or pseudonymous context – using ring signatures, etc, how does it work for the third party that such Principal is a co-party to the contract ; why and how the (human) Agent would want to stay in, or out, of it?

§ 6.03 Agent for Undisclosed Principal

When the Principal is undisclosed, for this Principal to be an AALE doesn't seem to affect this clause in principle. Question is, might this affect it in practical implementation conditions as seen above, starting with technical definition of what a “contract” is when an undisclosed AALE Principal is one of the parties, but not a signatory since undisclosed. If other parties are non-AALE, may contract just be paper (see previous clause “§ 3.02 Formal Requirements”).

§ 6.04 Principal Does Not Exist or Lacks Capacity

Relevant clause in case AALE Principal is deemed to lack capacity: why & how is it deemed so?

§ 6.05 Contract That Is Unauthorized in Part or That Combines Orders of Several Principals

(1) Might be relevant to situations whereas a non-AALE Agent may deviate from its AALE Principal, or, inversely, the AALE Agent is badly engineered in a way that results in such unauthorized deviation.

(2) Might be relevant to cases where either one or more of the several Principals are AALE(s) mixed up with non-AALE in dealing with this Agent ; or, the Agent is an AALE badly engineered in ways that result in this contractual confusion or unauthorized conflagration.

§ 6.06 Setoff

Some questions are to which extent “(non-)set off” conditions may and should be formalized & if appropriate encoded, when one or several parties are AALEs, in ways that are compliant yet reversible in case some issues arise. Or at least manageable in ways that don’t even further complicate everything when it doesn’t have to be that complicated in the first place (sigh).

§ 6.07 Settlement with Agent by Principal or Third Party

This plugs back into previous remarks when notions such as “manifestation”, “reasonable belief” or “reliance”, honest or mis-“representation”, etc., are introduced in AALE context. But also, to the extent to which certain settlement procedures may be formalized and encoded for automation & autonomous execution – which might be both a source of safety & problems.

§ 6.08 Other Subsequent Dealings Between Third Party and Agent

In a context of AALEs, this may be relevant to situations when the autonomous and automated nature of one or several of the parties is a root cause for “subsequent dealings” dynamics, and therefore suggests caution, dealing with the unintended consequences of AALEs in the mix.

§ 6.09 Effect of Judgment Against Agent or Principal

While key motivations here are to build a robust AALE-based economy, scalable & taxable, that remains affordable to and manageable by the largest possible human population, it is also reasonable to anticipate a substantial rise in law suits brought against AALEs, or by AALEs administrators who consider “their” valid AALE has been wronged. In that sense, the ethical duty of technological competence for lawyers in that field (as part of larger professional ethics guidance for lawyers - see ABA et al.), warrants to pay attention, within & beyond the scope of Agency Law, to “Effect of Judgment Against AALEs Agent or Principal”.

§ 6.10 Agent's Implied Warranty of Authority

This could be in particular relevant in a context of an AALE Agent gone “rogue” by virtue or rather vice of autonomy & automation, “by making a contract, representation, or conveyance to or with a third party on behalf of another person, lacking power to bind that person” – either deliberately, or by engineering bug, or having got hacked by bad actors siphoning revenues.

§ 6.11 Agent's Representations

In a similar vein, this could be in particular relevant in a context of an AALE Agent gone “rogue” (for whatever reason) in ways that affect the nature of its “representation” to the extent that various situations and conditions of § 6.11 Agent's Representations apply. Then again how does it pan out in Court when either AALE Agent or another party are a defendant.

§ 7.01 Agent's Liability to Third Party

Similar remark on AALE Agent gone “rogue”, whereas “tortious conduct” need to be defined.

§ 7.02 Duty to Principal; Duty to Third Party

Similar remark on AALE Agent gone “rogue”, whereas “tort liability” may be characterized once the criteria of AALE Agent process, while it “breaches a duty that the agent owes to the third party“, have been defined and refined both in broad terms and on case by case basis.

§ 7.03 Principal's Liability--In General

In particular when Agent is an AALE, the Principal’s liability issues plug back into perhaps 3 notions: -1- mutual cognitive, communication, formalization, possible encoding process when AALE Agent liaises with other parties -2- AALE Agent gone “rogue” for whatever reason with appropriate characterization of “tortious conduct”& “tort” by said AALE Agent, -3- last but not

least, when Principal is, say, also an AALE which in addition is disclosed but unidentified (anonymous or pseudonymous, involving ring signatures, etc), how exactly does enforcement of consequences of liability get implemented? Lest third party loses all settlements or assets.

§ 7.04 Agent Acts with Actual Authority

Similar remarks as previous clause § 7.03 Principal's Liability--In General.

§ 7.05 Principal's Negligence in Conducting Activity Through Agent; Principal's Special Relationship with Another Person

Similar remarks as previous clause § 7.03 Principal's Liability--In General. In addition, “When a principal has a special relationship with another person, the principal owes that person a duty of reasonable care with regard to risks arising out of the relation“, implies the Principal and that other person should reasonably assess risks of involving an AALE Agent.

§ 7.06 Failure in Performance of Principal's Duty of Protection

Similar remarks as previous clause § 7.03 Principal's Liability--In General.

§ 7.07 Employee Acting Within Scope of Employment

May be relevant to Present / Future of Work & Business situations, whereas friction & conflict may arise from involving AALEs in the mix with risks at both employer & employee level. In addition, “ (3) (b) the fact that work is performed gratuitously does not relieve a principal of liability. “ may be relevant to reasonably foreseeable situations whereas AALE Agent or even whole ecosystems perform gratuitously vs previously paid human workers, creating social resentment, and, besides rioting, attracting attention and focusing law suits against Principal.

(1) An employer is subject to vicarious liability for a tort committed by its employee acting within the scope of employment.

(2) An employee acts within the scope of employment when performing work assigned by the employer or engaging in a course of conduct subject to the employer's control. An employee's act is not within the scope of employment when it occurs within an independent course of conduct not intended by the employee to serve any purpose of the employer.

(3) For purposes of this section, (a) an employee is an agent whose principal controls or has the right to control the manner and means of the agent's performance of work, and (b) the fact that work is performed gratuitously does not relieve a principal of liability.

§ 7.08 Agent Acts with Apparent Authority

A principal is subject to vicarious liability for a tort committed by an agent in dealing or communicating with a third party on or purportedly on behalf of the principal when actions taken by the agent with apparent authority constitute the tort or enable the agent to conceal its commission. *This plugs back in remarks on cognitive, communication, behavior etc. issues for AALE Agent gone rogue with apparent authority, that affects Principal's liability & Estoppel. Again, how is that enforced when Principal is itself a disclosed but unidentified AALE that relies on anonymous or pseudonymous setting, ring signatures, etc.?*

While above exercise is primarily intended to our "rare book - 3 scenarii" legal hack, there could be observations recyclable in due time for Present / Future of Work & Business topics.